# NOTICE

## NO HAND CARRIED BIDS! NO MAILED BIDS!

Current security requirements established by the U.S. Capitol Police to screen mail being delivered to the U.S. Capitol Complex of buildings preclude the use of U.S. Postal Service by offerors to deliver their proposals submitted in response to this solicitation. In addition, because all packages must be screened for security purposes at a central location prior to their delivery, the Architect of the Capitol cannot accept packages containing offers handcarried directly to the Bid Room address within the Ford House Office Building, as specified elsewhere in this solicitation, or at any other location in the U.S. Capitol Complex of buildings.

Due to these unusual circumstances the Procurement Division for the Architect of the Capitol will only accept offers/proposals via UPS or FEDEX. See provision AOC52.215-1 Instructions to Offerors located in Section L for solicitations for services/supplies or the Solicitation solicitations for All handcarried Conditions for construction. offers/proposals will be rejected. Any attempt to handcarry an offer/proposal to any location in the U.S. Capitol Complex of buildings will be refused. Offerors are advised when sending proposals via FEDEX or UPS not to use same day delivery. FEDEX/UPS often subcontract out the delivery for same-day service. It is necessary for delivery personnel to arrive in a FEDEX/UPS truck and be in a uniform recognized as FEDEX/UPS. Offerors are encouraged to determine who will be making the delivery when making arrangements with FEDEX/UPS.

(Constructio	SOLICITATION,OFFER, AND AWARD (Construction, Alteration, or Repair) Architect of the Capitol		2. TYPE OF SOLICITAT SEALED BID (IFB) X NEGOTIATED (RF	05/16/2008	PAGE 1 OF 47 PAGES
	fer" section on the reverse must be fu				
4. CONTRACT NO.	5. REQUISITION/PURCHASE CB 080111	REQUEST NO. 6A. PROJE	- 100 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Modernization	
7. ISSUED BY AOC - Procurement Division 2nd & D Streets, SW Room H2-263 WASHINGTON, DC 20515		8. ADDRESS OFFER TO AOC - Procurement Division 2nd & D Streets, SW Room H2-263 WASHINGTON, DC 20515,	gi .		
9. FOR INFORMATIO	a. NAME Patrick Hunt		b. TELEPHONE NUMBER 202-226-1933	R (Include area code)(NO	COLLECT CALLS)
			ICITATION		
NOTE: In sealed b	id solicitations "offer" and "o	fferor" means "bid" and "b			
11. The Contractor sha	∥ begin performance1	5calendar days and c	complete it within75	calendar days after re	eceiving
X award, not	cice to proceed. This performance	e period is X mandatory	negotiable. ( (See		)
BONDS? (If "YES," indi	cate within how many calendar )	days after award in Item 12b)	, , , , , , , , , , , , , , , , , , ,	12b. CALENDAR DA	15
	CITATION REQUIREMENTS			(26,000-6078)	
local time06/13/2 containing offers s	(date). If this is a sealed bio shall be marked to show the offe	solicitation, offers will be put	re due at the place specified in ite blicly opened at that time. Sealed solicitation number, and the date a	envelopes	
<ul><li>b. An offer guarantee</li><li>c. All offers are subjet</li></ul>		and (2) other provisions and	clauses incorporated in the solicit	ation in full text or by refe	rence
<ul> <li>All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference</li> <li>Offers providing less than calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.</li> </ul>					

			OFF	ER (Must be t	ully complete	ed by offero	r)			
14. NAME AND ADDR	RESS OF OFFE		ZIP Code)		15. TELEPHON	IE NO. (Include	e area code)			
					16. REMITTAN	CE ADDRESS	(Include only if	different than I	tem 14.)	
17. The offeror agree	es to perform the	e work required	d at the price	es specified belo	w in strict accord	dance with the	terms of this so	licitation, if this	offer is accepte	ed
requirement state			rt any numbe	days after the der means the offe	eror accepts the	ie. (Insert any i minimum in Ite	number equal to m 13d.)	o or greater tha	n the minimum	
18. The offeror agre	es to furnish	any required	performan	ce and paymer	nt bonds.					
	(T	he offeror ackno	19 owledges re	. ACKNOWLED	GMENT OF AME ents to the solic	ENDMENTS itation give n	umber and date	e of each)		
AMENDMENT NO.										
DATE									<u> </u>	
20a. NAME AND TITLE	OF PERSON	ALITHOPIZED	TO SIGN O	EEED	Joh SIGNATI	IDE.	ļ		20c. OFFER I	
(Type or print)	OFFERDOR	AOTHORIZED	10 31614 0	FFER	200. SIGNATO	20b. SIGNATURE 20c				DATE
21. ITEMS ACCEPTED			AWA	ARD (To be co	mpleted by G	overnment)				
22. AMOUNT				23. ACCOU	NTING AND AP	PROPRIATION	N DATA			
24. SUBMI	T INVOICES TO (4 copies unles	O ADDRESS SI s otherwise spe	HOWN IN IT ecified)	EM 27	25. OTHER		AND OPEN CO	MPETITION P	URSUANT TO	
26. ADMINISTERED BY AOC - Procurement Div			St.			27. PAYMENT WILL BE MADE BY				
2nd & D Streets, SW Room H2-263	rision				Ford Hous	Accounting Division Ford House Office Bldg. Rm. H2-205				
WASHINGTON, DC 20515				Washington, DC 20515						
7		STATE OF THE STATE		FICER WILL CO						
28. NEGOTIATED and return deliver all items or per continuation sheets for obligations of the partiaward, (b) the solicitatis specifications incorporate	copies to issue form all work of the considerates to this con- ton, and (c) the ed by reference	uing office) Con requirements id tion stated in tract shall be a clauses, repre- e in or attached	ntractor agni dentified on this contract governed by esentations, I to this contract	ees to furnish a this form and a t. The rights ar y (a) this contra certifications, ar ract.	this solicita the contrac this contrac act and	tion is hereby t, which consis	accepted as to	the items liste vernment solici	is document.) d. This award of tation and your ecessary.	consummates
30a. NAME AND TITLE (Type or print)	OF CONTRAC	TOR OR PERS	SON AUTHO	RIZED TO SIGN	31a. NAME	OF CONTRAC	CTING OFFICE	R (Type or prin	it)	
30b. SIGNATURE		***	30	c. DATE	31b. UNITE	D STATES OF	AMERICA		31c. DA	TE SIGNED
					BY				_	
							-10-			

## **Summary Info Continuation Page**

The contractor is to furnish all labor, material and equipment to perform the modernization of Elevator S-4 in the U.S. Capitol Bulding in accordance with the specifications 01000 (22 pages); 028213 (35 pages); 028313 (13 pages); 14212 (45 pages); Drawing (1 sheet dated 3/25/08); solicitation conditions; supplementary conditions; general conditions; representations and certifications; and Davis Bacon Wage Decision Attachment No. 1, U.S. Capitol Police Request for Check of Criminal History - Attachment No. 2, ACH Vendor/Miscellaneous Payment Enrollment Form - Attachment No. 3

BASE

Number	Commodity Name	Quantity	Unit of Issue	Unit Price (\$)	Total Cost (\$, Inc. disc)
1	Elevator modernization	Total : 1.00	EA	\$	\$
	Description:Complete renovation and moderniza				

		-	
Lump-Sum Price for Base	\$		

## **General Conditions**

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52.21		- 1 /

Liquidated Damages--Construction (Sept 2000)

- (a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$250.00 for each calendar day of delay until the work is completed or accepted.
- (b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

#### 52.252-2

### 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of clause)

#### 52.223-3

Hazardous Material Identification and Material Safety Data (Jan 1997)

- (a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).
- (b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, list None)	Identification No.

- (c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.
- (d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.
- (e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.
- (f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

- (g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.
- (h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:
- (1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-
- (i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;
- (ii) Obtain medical treatment for those affected by the material; and
- (iii) Have others use, duplicate, and disclose the data for the Government for these purposes.
- (2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.
- (3) The Government is not precluded from using similar or identical data acquired from other sources.

#### 52.223-3 Alt I

Hazardous Material Identification and Material Safety Data (Jan 1997) - Alternate I (July 1995)

- (a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard
- No. 313 (including revisions adopted during the term of the contract).
- (b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous

material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item

Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, list None)	Identification No.

- (c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.
- (d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the
- requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph
- (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is
- the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.
- (e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete
- or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.
- (f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility

or liability for the safety of Government, Contractor, or subcontractor personnel or property.

- (g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.
- (h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:
- (1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-
- (i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;
- (ii) Obtain medical treatment for those affected by the material; and
- (iii) Have others use, duplicate, and disclose the data for the Government for these purposes.
- (2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.
- (3) The Government is not precluded from using similar or identical data acquired from other sources.
- (i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets

(MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials

identified in paragraph (b) of this clause.

- (1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.
- (2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the

Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's

must be placed in a weather resistant envelope.

(End of clause)

#### 52.252-1

## 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of provision)

#### 52.225-9

Buy American Act--Construction Materials (Jan 2005)

(a) Definitions. As used in this clause--

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or

supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

"Cost of components" means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

"Domestic construction material" means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

"Foreign construction material" means a construction material other than a domestic construction material."

"United States" means the 50 States, the District of Columbia, and outlying areas.

- (b) Domestic preference.
- (1) This clause implements the Buy American Act (41 U.S.C. 10a 10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.
- (2) This requirement does not apply to the construction material or components listed by the Government as follows:

[Contracting Officer to list applicable excepted materials or indicate none]

- (3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that--
- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.
- (c) Request for determination of inapplicability of the Buy American Act.
- (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-
- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;

- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and
- (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.
- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
- (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

## FOREIGN AND DOMESTIC CONSTRUCTION MATERIALS PRICE COMPARISON

Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
Item 1:			
Foreign Construction Material			
Domestic Construction Material			
Item 2:			
Foreign Construction Material			
Domestic Construction Material			

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]
[Include other applicable supporting information.]
[\* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

[* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]
(End of clause)
52.228-13
Alternative Payment Protections (July 2000)
(a) The Contractor shall submit one of the following payment protections:
(b) The amount of the payment protection shall be 100 percent of the contract price.
(c) The submission of the payment protection is required withindays of contract award.
(d) The payment protection shall provide protection for the full contract performance period plus a one-year period.

(e) Except for escrow agreements and payment bonds, which provide their own protection procedures, the Contracting Officer is

authorized to access funds under the payment protection when it has been alleged in writing by a supplier of labor or material that a nonpayment has occurred, and to withhold such funds pending resolution by administrative or judicial proceedings or mutual agreement of the parties.

(f) When a tripartite escrow agreement is used, the Contractor shall utilize only suppliers of labor and material that signed the escrow agreement.

(End of clause)

#### 52.228-14

Irrevocable Letter of Credit (Dec 1999)

- (a) "Irrevocable letter of credit (ILC)," as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.
- (b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.
- (c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and -
- (1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;
- (2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:
- (i) For contracts subject to the Miller Act, the later of -
- (A) One year following the expected date of final payment;
- (B) For performance bonds only, until completion of any warranty period; or
- (C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.
- (ii) For contracts not subject to the Miller Act, the later of -
- (A) 90 days following final payment; or
- (B) For performance bonds only, until completion of any warranty period.
- (d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of at least \$25 million must be confirmed by another acceptable financial institution that had letter of credit business of at least \$25 million in the past year.

(e) The following format shall be used	by the issuing financi	ial institution to crea	ite an ILC:	
Issue Date				

Irrevocable Letter of Credit No.
Account party's name
Account party's address
For Solicitation No(for reference only)
To:
We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States     This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on, or any automatically extended expiration date.
2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.
3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.
4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.  5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of
6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.
Sincerely,
(f) The following format shall be used by the financial institution to confirm an ILC:
(Date)
Our Letter of Credit Advice Number
Beneficiary:
Issuing Financial Institution:
Issuing Financial Institution's LC No.:

Gentlemen:
1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by for drawings of up to United States dollars/U.S.
\$ and expiring with our close of business on, or any automatically extended expiration date.
2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at
3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.
4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:
(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or
(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.
5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of
6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.
Sincerely,
(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:
SIGHT DRAFT
(Date)
Pay to the order of the sum of United States \$ This draft is drawn under Irrevocable Letter of Credit No
[Beneficiary Agency]
[By]
(End of clause)
52.236-9
Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements (Apr. 1094)

- (a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.
- (b) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site, and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

#### AOC52.202-2

Definitions - Construction (Jun 2004)

- (a) The term Government means the United States of America, represented by the Architect of the Capitol, who is the Contracting Officer.
- (b) The term head of the agency means the Committee, Commission, or other authority of the Legislative Branch of the Government having final jurisdiction or supervision over the work involved. The other authority as used in this paragraph includes the Architect of the Capitol in cases in which he has final jurisdiction or supervision over the work involved.
- (c) The term Architect as used in the contract documents shall mean the Architect of the Capitol.
- (d) The term Contracting Officer as used in the contract documents means the Architect of the Capitol or his duly authorized representative.
- (e) The term his duly authorized representative means any person or persons or board authorized to act for the head of the agency within the scope of their authority.
- (f) The term Contractor means the individual, partnership or corporation entering into a contract with the Government to perform the work specified.
- (g) The term Subcontractor, as used in this part, means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or other subcontractor. There is no privity of contract between the Government and the Subcontractors.
- (h) The term Project Director means the individual designated by the Architect to monitor the progress of work from a technical standpoint. The duties and responsibilities of the Project Director shall include supervision of scheduling, receipt and verification of Contractor s payrolls in accordance with the Davis Bacon Act, coordination between Divisions, concerning resolution and/or avoidance of potential problems and, to the extent authorized by the Delegation of Authority, if any, issuance of clarifications, supplemental agreements and change orders to the Contractor.
- (i) The term contract documents includes, collectively, the Project Manual, the contract drawings and the addenda and modifications thereto, if any.
- (j) The term work includes, but is not limited to, materials, labor, and manufacture and fabrication of components.
- (k) The term specifications means the portion of the Contract Documents that consist of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.
- (1) The term drawings means the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, that show the design, location and dimensions of the Work, and generally includes plans, elevations, sections, details, schedules and diagrams.
- (m) Wherever in the specifications or upon the drawings the word directed, required, ordered, designated, prescribed, or words of like import are used, it shall be understood that the direction, requirement, order, designation, or prescription, of the Contracting Officer is intended and similarly the words approved, acceptable, satisfactory, or words of like import shall mean approved by or acceptable to, or satisfactory to the Contracting Officer, unless otherwise expressly stated.
- (n) Where as shown, as indicated, as detailed, or words of similar import are used, it shall be understood that the reference is made to

the drawings accompanying this contract unless stated otherwise. The word provided as used herein shall be understood to mean provide complete in place, that is furnished and installed.

(End of clause)

#### AOC52.203-1

Advertising/Promotional Materials (Dec 2005)

- (a) It is the policy of the Congress to discourage contractors providing services and supplies to the Legislative Branch entities, including the Architect of the Capitol, from advertising practices that feature the Capitol and Capitol Complex in a manner in which conveys, or is reasonably calculated to convey, a false impression of sponsorship, approval or endorsement of any product or service by the Congress, the Government of the United States, or any Department, Agency or instrumentality thereof.
- (b) Contractors performing construction services for Legislative Branch entities, including the Architect of the Capitol, are discouraged from capitalizing on their contractual relationships with such entities and shall not engage in advertising practices which convey, or are reasonably calculated to convey, a false impression of sponsorship, approval or endorsement of any product or service by the Congress, the Government of the United States, of any Department, Agency or instrumentality thereof. This includes utilizing, in conjunction with the fact of their contractual relationship, images of the Capitol, any other buildings in the Capitol Complex, or any part of the United States Capitol Grounds in their advertising or promotional materials; and/or publishing or disseminating the aforementioned advertising or promotional materials.
- (c) The Contractor, by signing this contract, agrees to comply with the foregoing and to submit any proposed advertising or promotional copy connected in any manner with this contract and/or the Capitol, other Capitol Complex Buildings, or the United States Capitol Grounds to the Contracting Officer for approval prior to publication.
- (d) If this solicitation is for supplies or services, including construction, to be provided to or performed for the United States Supreme Court, the Contractor, by signing this contract, agrees that he or she will not advertise the award of the contract in his/her commercial advertising in such a manner as to state or imply that the Supreme Court of the United States endorses a product, project, or commercial line of endeavor.

(End of clause)

#### AOC52.203-2

Disclosure of Information to the General Public (Jun 2004)

- (a) Promptly after receiving any request from the general public for information on or data derived from this contract, the contractor shall notify the Architect of the Capitol, Procurement Division. The contractor shall cooperate with the Procurement Division in compiling or collecting information or data if the Architect of the Capitol determines the information or data to be releasable.
- (b) General public, for purposes of this clause, are those groups or individuals who are not authorized by law or regulation to have access.
- (c) This clause is not intended to prevent the contractor from providing contract information or data which the contractor is required to provide in order to conduct its business, such as insurance, banking, subcontracting.
- (d) The contractor is permitted to request that proprietary information or data not be released if such release would harm or impair the contractor in conducting its normal business. Such request must be documented with clear and specific grounds for that claim.

(End of clause)

#### AOC52.204-1

Printed or Copied Double-sided on Recycled Paper (Jun 2004)

The Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied doubled-sided on recycled paper and meet minimum content standards when not using electronic commerce methods to submit information or data to the Government.

(End of clause)

#### AOC52.204-4

AOC52.204-4 Personal Identity Verification of Contractor Personnel (Sep 2007)

- (a) By entering into this contract, the Contractor agrees to comply with all Federal laws that apply to the Contractor's activities, including but not limited to the U.S. Citizenship and Immigration Services' requirement to maintain a signed copy of I-9 Employment Eligibility Verification for each employee in accordance with 8 U.S.C. 1324(a).
- (b) The Employment Eligibility Verification Program (E-Verify), operated by the Department of Homeland Security and the Social Security Administration, allows U.S. employers to verify name, date of birth, and Social Security Number, as well as immigration information for non-citizens, against Federal databases in order to verify the employment eligibility of both citizen and non-citizen new hires. All contractors receiving AOC contracts are strongly encouraged to use this program to verify the status of their personnel. Information about the program can be obtained at <a href="https://www.dhs.gov/E-Verify">www.dhs.gov/E-Verify</a> or by calling 1-888-464-4218.
- (c) The Contractor shall insert this clause in all subcontracts when the subcontractor is required to have physical access to a Federally-controlled facility or access to a Federal information system.

#### AOC52.211-3

Deficiencies in Contract Documents (Jun 2004)

The Contractor shall promptly inform the Contracting Officer, in writing, of any discovered errors, omissions, discrepancies, conflicts or ambiguities in the contract documents before proceeding with any work affected by such factors. Failure to do so will be at the risk of the Contractor.

(End of clause)

#### AOC52.211-6

Notice to Proceed (Jun 2004)

A formal notice, or notices, to proceed will be issued as soon as practical, normally after approval by the Contracting Officer of the bonds and insurance. Unless specifically authorized in writing, any steps taken in connection with the performance of, or the preparation to perform, the contract, prior to issuance of the notice to proceed, will be the responsibility of and at the risk of the Contractor, and without any cost whatsoever to the Government.

(End of clause)

#### AOC52.215-10

Examination of Records (Jun 2004)

- (a) The Contractor agrees that the Architect of the Capitol or any duly authorized representatives shall, until the expiration of 3 years after final payment under this contract, have access to and the right to examine any books, accounting procedures and practices documents, papers, records and other data regardless of whether such items are in written form, in the form of computer data or in any other form and other supporting evidence, involving transactions related to this contract or compliance with any clause or certification thereunder.
- (b) The Contractor further agrees to include in all its subcontracts hereunder a provision to the effect that subcontractor agrees that the Architect of the Capitol or any authorized representatives shall, until the expiration of 3 years after final payment under the subcontract, have access to and the right to examine books, documents, papers, records other data regardless of whether such items are in written form, in the form of computer data or in any other form, and other supporting evidence, involving transactions related to the subcontract or compliance with any clause or certification thereunder.
- (c) The term subcontract as used in this clause excludes purchase orders not exceeding \$10,000.

(End of clause)

## AOC52.219-1

Utilization of Small Business Concerns (Aug 2004)

- (a) It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with all types of small business concerns as determined by the size standards in 13 CFR 121.
- (b) The Contractor agrees to accomplish the maximum amount of subcontracting to all types of small business concerns that the

Contractor finds to be consistent with the efficient performance of this contract.

(End of clause)

#### AOC52.222-3

Convict Labor (Jun 2004)

In connection with the performance of work under this contract the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, approved September 10, 1965, 18 U.S.C. 4082(c)(2).

(End of clause)

#### AOC52.222-4

Overtime Work (Aug 2004)

No extra reimbursement will be allowed for work performed outside regular working hours or on Saturdays, Sundays, or holidays and, for work performed in the District of Columbia, Presidential Inauguration Day, unless such work is authorized by the Contracting Officer; and provided such work is not otherwise required to be performed under the terms of the contract. If said authorization is verbal, with written verification thereof by signature of the Contracting Officer on the employee's weekly time record (see AOC52.232-2, Payments - Services or AOC52.232-3, Payments - Services Utilizing Time Records).

(End of clause)

#### AOC52.222-7

Workmen's Compensation Laws (Jun 2004)

The Contractor and his subcontractors employed on the site shall comply with the Workmen's Compensation Laws of the [District of Columbia Maryland Virginia].

(End of clause)

#### AOC52.223-1

Hazardous Material Identification and Material Safety Data - Supplement (Jun 2005)

- (a) Except as provided in paragraph (c), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS s), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in FAR 52.223-3(b).
- (b) For items shipped to consignees, the Contractor shall include a copy of the MSDS s with the packing list or other suitable shipping document which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS s to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.
- (c) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS in or on each shipping container. If affixed to the outside of each container, the MSDS s must be placed in a weather resistant envelope.
- (d) For items provided to a construction site, the contractor shall provide two copies of each MSDS. One copy shall be provided to the COTR in accordance with the Division 1 submittal requirements, and a second copy shall be kept in an MSDS binder on the job site.

(End of clause)

#### AOC52.223-3

Security Markings (Jun 2004)

(a) Before dissemination to subcontractors or other personnel, all AOC drawings and electronic copies thereof shall be considered at a minimum to be sensitive but unclassified (SBU). The following statement shall be imprinted on each page of drawings:

PROPERTY OF THE UNITED STATES GOVERNMENT

## COPYING, DISSEMINATING, OR DISTRIBUTING THESE DRAWINGS, PLANS OR SPECIFICATIONS TO UNAUTHORIZED USERS IS PROHIBITED

Do not remove this notice

Properly destroy documents when no longer needed

(b) The following paragraph shall be included on the cover page of the information (such as the cover page on a set of construction drawings and on the cover page of the specifications).

#### PROPERTY OF THE UNITED STATES GOVERNMENT

COPYING, DISSEMINATING, OR DISTRIBUTING THESE DRAWINGS, PLANS OR SPECIFICATIONS TO UNAUTHORIZED USERS IS PROHIBITED

Do not remove this notice

Properly destroy documents when no longer needed

(End of clause)

#### AOC52.223-4

Transmission or Posting of Drawings/Specifications (Jun 2004)

Due to security issues, the contractor is strictly prohibited from placing or transmitting drawings and specifications on the internet or modem without express permission from the Architect of the Capitol.

(End of clause)

#### AOC52.225-1

Buy American Act - Supplement (Jun 2004)

In addition to provisions of the above clause entitled, Buy American Act, the General Provisions of the Legislative Branch Appropriations Act provides in part, as follows:

- (a) It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available in the Act should be American-made.
- (b) In providing financial assistance to or entering into any contract with, any entity using funds made available in the Act, the head of each Federal Agency, to the greatest extent practicable, shall provide to such entity a notice describing the statement made in Paragraph (a) above, by the Congress.

(End of clause)

#### AOC52.228-2

Insurance - Work on a Government Installation (Jul 2005)

- (a) The Contractor shall, at his own expense, provide and maintain during the entire performance of this contract at least the kinds and minimum amounts of insurance as required in this clause.
- (b) Within twenty (20) calendar days after the date of contract award or before commencing work under this contract, whichever is earlier, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. A Certificate of Insurance evidencing the Contractor's compliance with the requirements of this clause, identifying all policies of insurance and sureties proposed for the provision of liability coverage pertinent to the work of the instant contract, including the endorsement required in this paragraph, and manually countersigned by an authorized representative of the insurance company shall be submitted in accordance with the time frame stated in this paragraph. All policies for liability protection, bodily injury, or property damage shall include the United States of America, acting by and through the Architect of the Capitol, as an additional insured with respect to operations under this contract. Each policy of insurance shall contain the following endorsement, which may be attached as a rider:

"It is understood and agreed that the Contractor's Insurance Company or surety shall notify the Architect of the Capitol, in writing, thirty (30) calendar days in advance of the effective date of any reduction in or cancellation of this policy."

- (c) Insurance and required minimum liability limits are:
- (1) Appropriate bodily injury and property damage liability insurance, with limits of not less than \$500,000 for each occurrence and \$2,000,000 for annual aggregate, including requirements for protection of hoisting and scaffolding operations, when applicable, and servicing areas adjacent to the building;

- (2) Automobile bodily injury liability insurance with limits of not less than \$200,000 for each person and \$500,000 for each accident, and property liability insurance, with a limit of not less than \$20,000 for each accident. A combined single limit for these coverages is acceptable; and/or
- (3) Workmen's compensation insurance as required by the laws of (1) the District of Columbia for work performed on a Government site located in the District of Columbia; (2) the State of Maryland for work performed on a Government site located in Maryland; or (3) the Commonwealth of Virginia for work performed on a Government site located in Virginia.
- (d) The Contractor shall insert the substance of this clause, including this paragraph, in subcontracts under this contract that require work on a Government installation, and shall require subcontractors to provide and maintain the insurance required in this clause. The Contractor shall maintain a copy of all subcontractors proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

#### AOC52.228-4

Indemnification and Hold Harmless Agreement (Jun 2004)

The Contractor agrees to indemnify and hold the Government harmless against any and all claims for damages to persons or property from any cause or causes whatsoever arising out of the performance of services covered by the contract; including, but not limited to, errors, omissions or negligent acts of the Contractor, but excluding active negligence of the Government, and against any and all costs, expenses, attorney's fees, and liability incurred by the Government in defending against such claims, whether the same proceed to judgement or not. In the prosecution of any successful claim or suit by the Government for the enforcement of this contract, the Contractor shall reimburse the Government for any reasonable attorney's fees and costs of claim or suit incurred by the Government.

(End of clause)

#### AOC52.228-5

AOC52.228-5 Payment Protection and Performance Bonds - Construction (Dec 2006)

- (a) Payment protection and performance bonds. (1) For a new definitive contract (one containing no provisions for issuance of task orders) or purchase order, payment protection and performance bonds, if required, shall be provided by the contractor after notice of award of the contract.
- (2) For indefinite-delivery contracts, the contractor has the option of providing --
- (i) Payment protection and performance bonds for the total estimated amount of the contract within the time frame as specified elsewhere in the contract; or
- (ii) Payment protection and performance bonds upon the issuance of each task order under the contract and as determined by the value of the instant task order within the time frame as specified elsewhere for the instant task order.
- (b) Required bonds. (1) A performance bond is not required if the original contract, purchase order, or task order amount is \$100,000 or less.
- (2) A performance bond (Standard Form 25) is required if the original contract, purchase order, or task order amount exceeds \$100,000. The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract, purchase order, or task order amount.
- (3) Payment protection is not required if the original contract, purchase order, or task order amount is \$30,000 or less.
- (4) Payment protection is required if the original contract, purchase order, or task order is greater than \$30,000. The penal amount of payment protection at the time of award shall be 100 percent of the original contract, purchase order, or task order amount. See FAR 52.228-13, Alternative Payment Protections, for the types of acceptable payment protection.
- (c) Irrevocable letter of credit. If an irrevocable letter of credit is used, FAR 52.228-14, Irrevocable Letter of Credit, is applicable and can be found at http://www.arnet.gov/far/index.html.
- (d) Additional bond protection. (1) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

- (2) The Government may secure the additional protection by directing the Contractor to increase the penal amount of hte existing bonds or to obtain an additional bond.
- (e) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified elsewhere in the contract or order or prior to commencing work, whichever is sooner.
- (f) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, or by other acceptable security such as postal money order, certified check, cashier s check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 3700 East West Highway Room 6F01, Hyattsville MD 20782 or via the internet at http://www.fins.treas.gov/c570.
- (g) Notice of subcontractor waiver of protection (40 U.S.C. 270 b(c). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.
- (h) Upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

### AOC52.228-6

Notice to Sureties (Jun 2004)

The final inspection and acceptance of the work included in this contract shall not be binding or conclusive upon the Government if it shall subsequently appear that the Contractor has willfully or fraudulently, or through collusion with the representatives of the Government in charge of the work, supplied inferior material or workmanship, or has departed from the terms of the contract, or if defects of any kind should develop during the period that the guarantees covering such material and workmanship are in force. In such event, the Government shall have the right, notwithstanding such final acceptance and payment, to have the work removed and to cause the work to be properly performed and satisfactory material supplied to such extent as, in the opinion of the Contracting Officer, may be necessary to finish the work in accordance with the drawings, if any, and specifications, at the expense of the Contractor and the sureties on its bond, and the Government shall have the right to recover against the Contractor and its sureties the cost of such work, together with such other damages as the Government may suffer because of the default of the Contractor in the premises, the same as though such acceptance and final payment had not been made.

(End of clause)

#### AOC52.232-4

Payments - Construction (Sep 2005)

- (a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.
- (b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, or estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.
- (1) The Contractor's request for progress payments shall including the following substantiation:
- (i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested;
- (ii) A listing of the amount included for work performed by each subcontractor under the contract;
- (iii) A listing of the total amount of each subcontract under the contract;
- (iv) A list of the amounts previously paid to each such subcontractor under the contract; and
- (v) Additional supporting data in a form and detail required by the Contracting Officer.
- (2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to

be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--

- (i) Consideration is specifically authorized by this contract; and
- (ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.
- (c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete Paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
- (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification.
- (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construe	ed as final acceptance of a subcontractor s performance.	
(Name)		
(Title)		
(Date)		

- (d) Retainage. In making such progress payments, there shall be retained 10 percent of the estimated amount until final completion and acceptance of all work required by the contract. However, if the Contracting Officer, at any time after 50 percent of the work has been completed, finds that satisfactory progress is being made, he may authorize any of the remaining partial payments to be made in full. Also, whenever the work is substantially complete, the Contracting Officer, if he considers the amount to be retained to be in excess of the amount adequate for the protection of the Government, at his discretion, may release to the Contractor all or a portion of such excess amount. Furthermore, on completion and acceptance of each separate building, public work, or other division of the contract, on which the price is stated separately in the contract, payment may be made therefore without retention of a percentage. Retainage under any contract action awarded by the Architect functioning in the capacity as a Contracting Officer for the agency shall be released by the Architect rather than an administrative Contracting Officer.
- (e) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as-
- (1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or
- (2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.
- (f) Final payment. The Government shall pay the amount due the Contractor under this contract after-
- (1) Completion and acceptance of all work;
- (2) Presentation of a properly executed voucher; and
- (3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claims to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).
- (g) Invoices shall be issued monthly as defined in Paragraph (b) in which services are performed by the Contractor. Properly certified invoices shall be FAXED to the Architect of the Capitol, Accounting Division at (202) 226-2580. Information concerning requirements for payment requisitions must be secured by telephoning the Accounting Officer at (202) 226 2552. Payment will be made on a monthly basis. To assist the AOC in making timely payments, the Contractor is requested to furnish the following additional information on the invoice:
- (1) Contract Number;
- (2) Name and address of Contractor;

- (3) Invoice Date:
- (4) Period the payment covers; and
- (5) Amount by line item as identified in the Schedule.
- (h) Each invoice shall be in accordance with the SCHEDULE OF SUPPLIES OR SERVICES AND PRICES/COSTS FOR CONSTRUCTION completed during the payment period. The Contractor shall keep accurate time records for each of his personnel employed in the work, and information copies of the Contractor's time records (payrolls) shall be submitted with each invoice for payment. Original certified copies of Contractor's payrolls shall have been submitted weekly in arrears to the Contracting Officer in accordance with the Davis Bacon Act.
- (i) Payments will be made directly to your financial institution through Direct Deposit/Electronic Funds Transfer (DD/EFT). The Contractor's attention is directed to the requirements of AOC52.232-6, Payment By Electronic Funds Transfer Other than Central Contractor Registration.

#### AOC52.232-6

Payment by Electronic Funds Transfer - Other than Central Contractor Registration (Jun 2004)

- (a) Method of payment.
- (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT) except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer.
- (2) In the event the Government is unable to release one or more payments by EFT, the contractor agrees to either
- (i) Accept payment by check or some other mutually agreeable method of payment; or
- (ii) Request the Government to delay payment until such time as the Government makes payment by EFT (but see paragraph (d)).
- (b) Mandatory submission of Contractor's EFT information. (1) The Contractor is required to provide the Government with the information required to make payment by EFT (see paragraph (i) of this clause). The contractor shall provide this information directly to the office designated in paragraph (k) to receive that information (hereafter: "designated office") by three working days after notification of contract award. If not otherwise specified in this contract, the payment office is the designated office for receipt of the contractor's EFT information. If more than one designated office is named for the contract, the contractor shall provide a separate notice to each office. In the event that the EFT information changes, the contractor shall be responsible for providing the updated information to the designated office(s).
- (2) If the contractor provides EFT information applicable to multiple contracts, the contractor shall specifically state the applicability of this EFT information in terms acceptable to the designated office. However, EFT information supplied to a designated office shall be applicable only to contracts that identify that designated office as the office to receive EFT information for that contract.
- (c) Mechanisms for EFT payment. The Government may make payment by EFT through the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.
- (d) Suspension of payment.
- (1) Notwithstanding the provisions of any other clause of this contract, the Government is not required to make any payment under this contract until after receipt, by the designated payment office, of the correct EFT payment information from the Contractor. Until receipt of the correct EFT information, any invoice or contract financing request shall be deemed not to be a valid invoice.
- (2) If the EFT information changes after submission of correct EFT information, the Government shall begin using the changed EFT information no later than the 30 days after its receipt by the designated office to the extent payment is made by EFT. However, the Contractor may request that no further payments be made until the changed EFT information is implemented by the payment office.
- (e) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government failed to use the Contractor provided EFT information in the correct manner, the Government remains responsible for-
- (i) Making a correct payment; and

- (ii) Recovering any erroneously directed funds.
- (2) If an uncompleted or erroneous transfer occurs because Contractor's EFT information was incorrect at the time of Government release or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and
- (i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or
- (ii) If the funds remain under the control of the payment office, the Government shall not make payment and the provisions of paragraph (d) shall apply.
- (f) EFT and assignment of claims. If the contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the contractor shall require as a condition of any such assignment that the assignee shall provide the EFT information required by paragraph (i) of this clause to the designated office and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the contractor. EFT information that shows the ultimate recipient of the transfer to be other than the contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of Paragraph (d) of this clause.
- (g) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information provided by the contractor s financial agent.
- (h) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address in the contract.
- (i) EFT Information. The contractor shall provide the following information to the designated payment office. The contractor may supply this data for this or multiple contracts (see paragraph (b) of this clause). The Contractor shall designate a single financial agent per contract capable of receiving and processing the EFT information using the EFT methods described in paragraph (c) of this clause. The information required is as follows:
- (1) The contract number;
- (2) The contractor s name and remittance address as stated in the contract(s);
- (3) The signature (manual or electronic, as appropriate), title, and telephone number of the contractor s official authorized to provide this information;
- (4) The name, address, and 9 digit Routing Transit Number of the contractor s financial agent; and
- (5) The contractor s account number and the type of account (checking, saving or lockbox).
- (j) The Contractor shall send all EFT information, and any changes to EFT information to the office designated in paragraph (k) of this clause. The Contractor shall not send EFT information to the payment office, or any other office than that designated in paragraph (k). The Government need not use any EFT information sent to any office other than that designated in paragraph (k).
- (k) Designated office:

Name: Architect of the Capital Accounting Division Mailing Address: 2nd and D Streets SW Ford House Office Building Washington, DC 20515

Telephone: (202) 226-2552 Facsimile: (202) 225-7321

#### AOC52.232-12

Assignment - Supplement (Sep 2004)

Neither the contract nor any interest therein shall be assigned. However, moneys due or to become due under the contract may be assigned in accordance with the provisions of FAR clause 52.232-23 (ASSIGNMENT OF CLAIMS) as incorporated by reference in Section I.

(End of clause)

#### AOC52.233-1

Disputes (Mar 2008)

- (a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613) and as modified by Section 1501 of Title I of Division H of the Consolidated Appropriations Act, 2008, Pub. L. 110-161. (31 U.S.C. 702 NOTE).
- (b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.
- (c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$50,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- (d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer. For the purposes of this clause, all final decisions shall be rendered by the Architect of the Capitol's Director or Deputy Director, Procurement Division.
- (2)(i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding \$50,000.
- (ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.
- (iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor."
- (3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.
- (e) For Contractor claims of \$50,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$50,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.
- (f) The Contracting Officer's decision shall be final unless the Contractor appeals, within ninety days of receipt of a Contracting Officer's decision, to the Government Accountability Office Contract Appeals Board, 441 G Street NW, Room 7182, Washington, DC 20548; facsimile 202-512-9749 or e-mail CAB@gao.gov.
- (g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.
- (h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

(End of clause)

#### AOC52.233-2

Claims for Equitable Adjustments - Waiver and Release of Claims (Jun 2004)

- (a) Whenever the Contractor submits a claim for equitable adjustment under any paragraph of this contract which provides for equitable adjustment of the contract, such claim shall include all types of adjustments in the total amounts to which the paragraph entitles the Contractor, including but not limited to adjustments arising out of delays or disruptions or both caused by such change. Except as the parties may otherwise expressly agree, the Contractor shall be deemed to have waived (1) any adjustments to which it otherwise might be entitled under the paragraph where such claims fail to request such adjustments, and (2) any increase in the amount of equitable adjustments additional to those requested in its claim.
- (b) Further, the Contractor agrees that, if required by the Contracting Officer, he will execute a release, in form and substance satisfactory to the Contracting Officer, as part of the supplemental agreement setting forth the aforesaid equitable adjustment, and that such release shall discharge the Government, its officers, agents and employees, from any further claims, including but not limited to further claims arising out of delays or disruptions or both, caused by the aforesaid change.

(End of clause)

#### AOC52.233-3

Limitation on Damages for Delay (Jun 2004)

- (a) The Architect shall not be obligated or liable to the Contractor for, and the Contractor hereby expressly waives any claims against the Architect on account of any damages, of any nature whatsoever, which the Contractor, or its subcontractor at any tier may incur as a result of delays, interferences, disruptions, suspensions, changes in sequence or the like arising from or out of any act or omission of the Architect, it being understood and agreed that the Contractor's sole and exclusive remedies in such event shall be a reimbursement of direct costs necessarily incurred as a result of the foregoing causes, and an extension of the contract time, but only in accordance with the provisions of the Contract Documents.
- (b) For the purposes of this clause, the term "Damages" shall include all indirect and/or impact costs which shall include, without limitation: unabsorbed Home Office Overhead (including calculations under the "Eichleay Formula"), Idle Labor and Equipment, Loss of Productivity, and Interest; the term "Damages" shall not include on-site direct costs, which shall include direct labor (superintendence, labor, time-keeping, and clerical work) direct materials and supplies (including material handling), direct equipment, restoration and cleanup, overhead and profit (but only as permitted under the clauses Changes and Changes Supplement, taxes, insurance, and bonding costs, which will be calculated in accordance with the clauses Changes and Changes Supplement. Provided, however, that the accounting practice of treating these costs as "direct" shall be in accordance with
- (1) The Contractor's established and consistently followed cost accounting practices for all work; and
- (2) FAR Cost Accounting Cost Principles and Procedures (FAR Part 31).
- (c) To the extent that any other provision of this contract provides for the payment of damages, as defined in this clause, to the Contractor and is thus inconsistent with the provisions of this clause, such other provision will be superseded hereby with respect to the issue of damages.

(End of clause)

## AOC52.236-2

Other Contracts and Work (Jun 2004)

- (a) The Contractor shall fully inform himself as to conditions relating to construction and labor under which other work, if any, is being performed, or is to be performed, by or for the Government, by contract or otherwise, where such work may affect or be affected by, operations under this Contract.
- (b) Notwithstanding the performance by other parties of work at the site during performance of this contract, the Contractor shall prosecute the work diligently and continuously, and he shall cooperate in every way with such other parties. The Contractor shall give such other parties, to the extent their work is affected by his work, all information necessary for the proper execution of their work, without delay. The Contractor shall so arrange and conduct his work that other parties may complete their work at the site according to schedule. All other work under the instant contract shall be carefully coordinated with work under such other contracts.

#### AOC52.236-3

Accident Prevention and Safety and Health Programs - Construction (Sep 2004)

- (a) The Contractor shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others and comply with the safety and health standards published in 41 C.F.R. Part 50-205, including any matters incorporated by reference therein. He shall also be responsible for all materials delivered and work performed until completion and final acceptance of the entire contract work, except for any completed unit thereof which theretofore may have been finally accepted.
- (b) Williams-Steiger Occupational Safety and Health Act. The Contractor shall also comply in all aspects of the job with the regulations issued by the Secretary of Labor pursuant to the Williams-Steiger Occupational Safety and Health Act of 1970, as set forth in Title 29 of the Code of Federal Regulations. The Contractor shall bring to the attention of the Architect any work encountered which may involve entry into a suspected confined space as defined by OSHA. A determination will be made by the Architect, and if the area is deemed a permit required confined space, additional protective measures will be needed, per OSHA requirements.
- (c) National Fire Protection Association standards. The Contractor shall comply with all applicable standards of the National Fire Protection Association relative to fire prevention, except to the extent that more exacting requirements are specified or imposed by the Contracting Officer. The Contractor shall keep and properly maintain fire prevention devices at the job site and shall take all possible precautions deemed necessary by the Government representative in charge of the work.
- (d) Protection of property and persons. (1) The Contractor shall protect all of his material and work at the site, whether incorporated in the work or not, against damage or loss from any cause, and he shall take all necessary precautions against damage to all other work and material on the site. He shall provide and maintain necessary safeguards for protection of his employees, Government employees and the public generally, and he shall take all other proper precautions for their protection against injury. He shall comply with all directives and regulations of the Contracting Officer and other proper authorities relative to the use of public property.
- (2) The Contractor shall protect all electric, telephone, computer facilities, water, gas, sewer, steam and other underground utility lines, in sidewalks, streets or other areas in, under or around the site, to the satisfaction of the Contracting Officer, the Government of the District of Columbia, and all other authorities having jurisdiction.
- (3) The performance of work at the site by other parties shall not relieve the Contractor from any liability for loss or damage or from his obligations under this contract. No agreement or arrangement between the Contractor and others as to a division or proportionate share of liability for loss or damage incurred, or of the cost of insurance, shall in any way relieve the Contractor of such liability or his obligations under this contract.
- (e) The Contractor shall comply with the requirements of FAR 52.236.13, Accident Prevention. In the event that conditions on the site pose an imminent danger or threat to the Contractor's workers, the public, Government employees, other persons, or to Capitol complex structures and property of historical significance, the Contracting Officer can verbally order the Contractor to suspend work operations in the specified area until said conditions are corrected to the Contracting Officer's satisfaction. The Contracting Officer shall promptly issue a written order to suspend the work to the Contractor formalizing the specifics of the verbal suspension of work.
- (f) The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(End of clause)

#### AOC52.236-4

Cutting and Patching (Jun 2004)

Prior to initiation of the work operations of either cutting or patching, as a necessary requirement of the work under this contract, of any structural component or of lintels, stair systems, piping, duct work, vessels, equipment and like items in the building, the Contractor shall consult with the Contracting Officer and follow explicitly his directions and stated requirements concerning methods, materials, the manner in which the work is performed, and the level of competence and skill possessed by Contractor's employees, or those of subcontractors, who are proposed to be employed in said cutting and/or patching operations.

(End of clause)

#### AOC52.236-5

Cleaning and Restoring (Jun 2004)

- (a) The contractor shall remove dirt and debris resulting from the operations under this contract daily.
- (b) The Contractor shall, as a condition precedent to the final acceptance of the work, remove from the site of the work all remaining plant, installations, temporary barricades, temporary facilities, equipment, tools, materials, refuse, rubbish and waste, used or accumulated in connection with, but not incorporated in, the work, unless otherwise specified or directed, and he shall leave the buildings, grounds, streets, and all public places occupied by him in a thoroughly clean, neat and satisfactory condition.

#### AOC52.236-8

Scheduling of Work (Aug 2004)

- (a) The Contractor shall, before commencing work on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of partial payments until the Contractor submits the required schedule.
- (b) The Contractor shall furnish sufficient forces, construction plant and equipment, and shall work such hours as necessary to insure prosecution of work in accordance with the approved schedule. If, in the opinion of the Contracting Officer, the Contractor falls behind in the scheduled progress, the Contractor shall take such steps as may be necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained. The provisions of this subparagraph shall not be construed as prohibiting work on Saturdays, Sundays and holidays and, for work performed in the District of Columbia, Presidential Inauguration Day, if the Contractor so elects and if approved.
- (c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

(End of clause)

#### AOC52.236-9

Schedule of Values (Jun 2004)

- (a) The Contractor shall, in accordance with the requirements of the Contracting Officer, prepare and submit for approval a schedule of estimated values of all parts of the work, and shall submit such quantity breakdowns pertinent thereto as the Contracting Officer may deem necessary for the proper checking of partial payment requisitions and for other administrative purposes. The total of the schedule of values shall equal the amount of the contract. The values employed in making this schedule will be used only for determining partial payments; they will not be used as a basis for determining an increase or decrease in the contract price. The listings and subdivisions of this schedule for estimated costs and quantity breakdowns shall be as approved by the Contracting Officer.
- (b) The submission and approval of the schedule of values shall be a condition precedent to the making of partial payments.

(End of clause)

#### AOC52.236-10

Specifications and Drawings for Construction (Feb 2007)

(a) The Contractor shall keep on the site of the work a copy of the drawings and specifications, and of approved shop drawings, product data and samples and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, or in case of discrepancy either within the figures, within the drawings, or within the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and

expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information he considers necessary, unless otherwise provided.

- (b) Shop drawings means drawings submitted to the Government by the Contractor, subcontractor, any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i.e., form, fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract.
- (c) The Contractor shall--
- (1) Check all drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (c); and
- (5) Reproduce and print contract drawings and specifications as needed.
- (d) In general--
- (1) Large scale drawings shall govern small scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.
- (e) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.
- (f) The work shall conform to the specifications and the contract drawings included as part of this contract.
- (g) The Contractor shall submit to the Contracting Officer for approval shop drawings, product data and samples as required under the various sections of this Project Manual. The Contractor shall coordinate all such submittals, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings, product data, or samples submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for re-submission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such submittals, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with Paragraph (d) below.
- (h) If shop drawings, product data, or samples show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.
- (i) Upon completing the work under this contract, the Contractor shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the equipment is completed and accepted. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings, product data or samples delivered under this contract.
- (j) The provisions of this entire paragraph shall be included in all subcontracts at any tier.

(End of clause)

### AOC52.236-12

Product Data and Samples (Jun 2004)

(a) Product data shall mean information (e.g., catalog cuts, standard illustrations, drawings, performance charts, data and brochures) pertinent to a particular product, equipment or material required as a part of the work. Product data is required to establish, for the purposes of evaluation and approval, details of the product offered in response to specifications elsewhere in the contract documents.

Product data pertains to significant elements such as (1) design; (2) materials; (3) components; (4) performance characteristics; and (5) methods of manufacture, assembly, construction, or operation. The term includes, in addition to the above, the manufacturer's standard printed recommendations for application and use, compliance with recognized standards of trade associations and testing agencies, and the application of their labels and seals (if any).

- (b) Samples are physical examples of materials, equipment or workmanship that will be used by the Contracting Officer to establish standards by which the work will be judged.
- (c) Samples not subject to destructive tests may be retained by the Contracting Officer until completion of the work; they will then be returned to the Contractor, at his own expense, if he so requests in writing.

(End of clause)

#### AOC52.243-1

Changes - Supplement (Jun 2004)

- (a) Definitions.
- (1) A change order is a unilateral contract modification, signed by the Contracting Officer, which describes and identifies a particular change in the requirements as permitted by the FAR clause, 52.243-4, Changes and authorizes the contractor to begin performance with the changed requirements. The change order may reference pertinent oral or written directives, provide an adjustment to the contract price and/or time for performance, and direct the contractor to submit a proposal for definitization of the change order.
- (2) A supplemental agreement is a bilateral contract modification, signed by the contractor and the Contracting Officer, which either authorizes the contractor to begin performance with the changed requirements in accordance with the equitable adjustment agreed to prior to commencement of performance of the changed requirements or definitizes a change order after agreement of an equitable adjustment to the contract.
- (3) Request for Proposal. A request by the Contracting Officer or his duly authorized representative for the contractor to submit a proposal for requirements contemplated to be changed. Such proposal shall be submitted within the time limit specified in the request and in accordance with the requirements and limitations of this clause.
- (b) Authorization of changes. All changes to contract requirements will be authorized in writing by the Contracting Officer through one of the following methods:
- (1) A Supplemental Agreement, with the concurrence of the contractor; or
- (2) A unilateral Change Order.
- (c) Submission of proposals and cost breakdowns by the contractor.
- (1) Proposals for changes to the contract requirements shall include a brief description of the change; a breakdown of costs as outlined hereinafter; and a time impact analysis (fragnet).
- (2) In considering proposals for changes involving added requirements, omitted requirements, or any combination thereof, the Contracting Officer or his duly authorized representative will make check-estimates in such detail as he deems necessary with the view of arriving at equitable adjustments. With each proposal, the contractor shall submit separately an itemized breakdown as per "Exhibit A" hereof, which shall include, but not be limited to, the following:
- (i) Direct labor costs;
- (ii) Social Security and Unemployment Insurance Taxes:
- (iii) Workmen's compensation and general liability insurance:
- (iv) Direct material quantities and unit prices (separated into trades);
- (v) Construction equipment;
- (vi) Overhead; and
- (vii) Profit.
- (3) If the contractor believes that the change in the contract requirements affects the contract period of performance, as required by

- AOC52.211-5, Commencement, Prosecution, and Completion of Work, of the Supplementary Conditions, appropriate substantiation must be submitted for evaluation/review.
- (4) A complete proposal, including breakdown of cost and time impact, shall be submitted by the contractor within the time frame stipulated in calendar days by the Government for each proposed change. Generally, complete proposals shall be submitted by the contractor within 7 calendar days after the contractor receives the request for proposal, although this time frame may be adjusted for more complex or more urgent requirements. Except as provided by an individual contract modification, no payment for a change order will be made until a supplemental agreement has been signed by the contractor and the Contracting Officer. If complete proposals are not received timely, the Contracting Officer, after consultation with his authorized representative, may determine the cost of the change and the time impact and issue a change order based upon this determination with the stipulation that if a supplemental agreement is not negotiated within a reasonable amount of time, this determination will be final and conclusive, subject only to the contractor's rights of appeal as provided in AOC52.233-1, Disputes, of the General Conditions.
- (d) Allowances for overhead and profit.
- (1) The following percentages will be allowed for overhead and profit:
- (i) The contractor shall receive, as a percentage of the cost of all work performed by his own organization, an amount not to exceed 10% overhead and not to exceed 10% profit; and
- (ii) If subcontractor(s) are involved in the change, a fee in an amount not to exceed 10% as a percentage of the total price of the subcontractor portion of the change.
- (iii) Subcontractor(s) to the prime contractor (first tier subcontractor(s)) shall receive, as a percentage of the cost of all work performed by or for it, a total amount not to exceed 10% overhead and not to exceed 10% profit.
- (iv) The percentages for fees, overhead, and profit permitted by the above shall be allowed only for the contractor and its first tier subcontractors. Percentages for fees, overhead, and profit in any amount will not be allowed for subcontractors of any other tier.
- (2) Percentages for overhead allowed are deemed to include, but shall not be limited to, the following:
- (i) Field Overhead Items.
- (A) Trailer;
- (B) Storage Facilities;
- (C) Contractor's and subcontractor's superintendence;
- (D) Construction equipment/tools, except those that are specially required for a specific change;
- (E) Utilities;
- (F) Contractor's and subcontractor's field office, administrative/support staff;
- (G) Cost of preparing record drawing changes, correspondence, etc., relating to the contract;
- (H) Job site safety aids; and
- (I) Cleaning and maintenance of nuisance debris from jobsite.
- (ii) Office Overhead Items for Contractor and Subcontractors.
- (A) Maintenance/operation of principal or branch offices;
- (B) Personnel costs;
- (C) Cost for preparing correspondence, fragnets, etc., relating to the contract; and
- (D) Cost of insurance and bonds, except for insurance costs relating to direct labor, as outlined in "Exhibit A".
- (iii) For changes which include custom items unique to the project and which are fabricated off-site, the fabricator, whether the contractor or a subcontractor at any tier, shall furnish a breakdown of costs associated with the work in the fabricating plant. This breakdown shall include labor, material, equipment and overhead/plant costs in sufficient detail to allow for review by the Contracting Officer or his duly authorized representative. Costs charged to overhead/plant shall be allowable costs for the fabricator, whether he is

the contractor or a subcontractor at any tier, provided that the costs claimed are consistent with the provisions of Subpart 31.203 of the Federal Acquisition Regulation (Chapter 1, Title 48, Code of Federal Regulations). An amount not to exceed 10% of the cost of the fabricated item will be allowed for the fabricator's profit. If the fabricator is a subcontractor, the overhead and profit percentages for the contractor and any subcontractor at a higher tier having a contractual relationship with the fabricator shall be allowed in accordance with this clause.

- (e) Changes involving decreases in price. For changes involving only a decrease in price, the contractor and subcontractors shall return as credit for overhead and profit those same percentages which are allowed for like changes involving increases in price. On changes involving both an increase and a decrease in price, overhead and profit will be allowed only on the net increase.
- (f) Changes involving increases or decreases on basis of contract specified unit prices. No percentages for overhead and profit will be added to, or deleted from, any unit prices in event of an increase or decrease in the contract requirements on the basis of contractual unit prices.

## **EXHIBIT A**

## TYPICAL FORM OF BREAKDOWN FOR PRICE ADJUSTMENT

#### SUBCONTRACTORS' BREAKDOWN

						Extensions		
Items Involved	Quantities	Unit Cost	Equipment	Material	Labor	Totals	Final Totals	Unit Cost
Excavation (Identify)						14		
* Volume								
* Crane Operator								
* Laborers						- All-Court III - Chill		
Shoring (Identify)								
* Area								
* Welder								
Subcontractor Total								

#### PRIME CONTRACTOR'S BREAKDOWN

	A SERVER					Extensions		16 37
Items Involved	Quantities	Unit Cost	Equipment	Material	Labor	Totals	Final Totals	Unit Cost
West Wall (Cinder Block)								
* Area								-13-19-17-17-2-1
* Block 8x8x16								
* Mortar								
* Mason				1 395 1 500				
* Laborer								
Subtotal								
Prime Contractor's Total								
Prime Contractor's Overhead and Profit on Subcontractor								
Total								

(End of Clause)

## AOC52.244-1

Award of Subcontracts and Other Contracts for Portions of the Work (Sep 2005)

- (a) The Contractor is responsible for coordination of all work performed by its own workforce and those of its subcontractors. Each subcontractor shall be experienced in and capable of performing in a satisfactory manner all work in his speciality, and shall meet the standard of competence established for the Contractor.
- (b) The Contractor shall be responsible for all acts of subcontractors employed by him under this contract, and for their compliance

with all terms and provisions of the contract applicable to their performance. The Contractor shall continuously coordinate the work of all sub-contractors to assure proper processing and progress of the Work. The Contractor shall require each subcontractor to (1) examine the project schedule, shop drawings and the work of other trades and all sections of the specifications to the extent necessary for satisfactory Installation of his work, and connection between his work and the work of other trades; (2) coordinate his work accordingly; and (3) cooperate with other trades toward timely and satisfactory completion of the entire work.

- (c) Organization of the specifications into sections and subsections and the arrangement of drawings shall not control the Contractor in dividing work among subcontractors or in establishing the extent of work to be performed by any trade.
- (d) The Government reserves the right to require dismissal of any subcontractor who, by reason of previous unsatisfactory work on AOC projects or for any other reason, is considered by the Contracting Officer to be incompetent or otherwise objectionable for performing work under this contract.
- (e) Nothing contained in the contract documents shall create any contractual relations between any subcontractor and the Government.

(End of clause)

#### AOC52.246-1

Final Inspection and Acceptance - Construction - Supplement (Mar 2007)

- (a) No inspection or other action of the Government shall be construed to constitute a final acceptance of any portion of the work under this contract until all work under the contract is completed. None of the work under the contract shall be deemed to be finally accepted until the Contractor, upon completion and final inspection of all work, is notified in writing of final acceptance of work under the contract, or in lieu thereof, until final payment of the final voucher as prescribed in AOC52.232-4, Payments Construction. The provisions of FAR clause 52.246-12, Inspection of Construction are hereby modified by the provisions of this paragraph with respect to the finality of acceptance of any portion of the work by the Government prior to completion of all work under the contract.
- (b) The Contractor shall notify the Contracting Officer, at least 10 days in advance, of the date the work will be fully complete and ready for final inspection. Any additional costs incurred by the Government due to necessary reinspection of work found not ready for final inspection upon the Contractor's notice of completion will be charged to the Contractor and deducted from the contract price.

(End of clause)

Clauses By Reference

Clause	Title	Date
52.246-12	Inspection of Construction	11/08/2006

Clauses By Reference

Clause	Title	Date
52.203-3	Gratuities	11/08/2006
52.203-5	Covenant Against Contingent Fees	11/08/2006
52.203-6	Restrictions On Subcontractor Sales To The Government	11/08/2006
52.215-2	Audit and RecordsNegotiation	11/08/2006
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	11/08/2006
52.222-6	Davis Bacon Act	11/08/2006
52.222-7	Withholding of Funds	11/08/2006
52.222-8	Payrolls and Basic Records	11/08/2006
52.222-9	Apprentices and Trainees	11/08/2006

Clause	Title	Date
52.222-10	Compliance with Copeland Act Requirements	11/08/2006
52.222-12	Contract Termination-Debarment	11/08/2006
52.222-13	Compliance with Davis-Bacon and Related Act Regulations.	11/08/2006
52.222-14	Disputes Concerning Labor Standards	11/08/2006
52.222-15	Certification of Eligibility	11/08/2006
52.222-26	Equal Opportunity	03/22/2007
52.222-27	Affirmative Action Compliance Requirements for Construction	11/08/2006
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	11/08/2006
52.222-36	Affirmative Action For Workers With Disabilities	11/08/2006
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans	11/08/2006
52.223-2	52.223-2 Affirmative Procurement of Biobased Products Under Service and Construction Contracts (Dec 2007)	12/07/2007
52.223-6	Drug Free Workplace	11/08/2006
52.227-1	Authorization and Consent (Dec 2007)	12/07/2007
52.227-4	Patent Indemnity - Construction Contracts (Dec 2007)	12/07/2007
52.228-2	Additional Bond Security	11/08/2006
52.228-12	Prospective Subcontractor Requests for Bonds	11/08/2006
52.229-3	Federal, State And Local Taxes	11/08/2006
52.232-23	Assignment Of Claims	11/08/2006
52.236-2	Differing Site Conditions	11/08/2006
52.236-3	Site Investigation and Conditions Affecting the Work	11/08/2006
52.236-5	Material and Workmanship	11/08/2006
2.236-6	Superintendence by the Contractor	11/08/2006
52.236-7	Permits and Responsibilities	11/08/2006
2.236-8	Other Contracts	11/08/2006
2.236-11	Use and Possession Prior to Completion	11/08/2006
2.236-13	Accident Prevention	11/08/2006
2.236-26	Preconstruction Conference	11/08/2006
2.242-13	Bankruptcy	11/08/2006
2.242-14	Suspension of Work	11/08/2006

Clause	Title	Date
52.243-4	Changes	05/18/2007
52.245-2	Government Property Installation Operation Services	05/18/2007
52.246-21	Warranty of Construction	11/08/2006
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	09/01/1996
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) - Alternate I	11/08/2006

## **Supplementary Conditions**

#### AOC52.201-1

Contracting Officers Authority (Jun 2004)

The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, notwithstanding any provision contained elsewhere in this contract. In the event that the Contractor makes any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in costs incurred as a result thereof.

(End of clause)

#### AOC52.201-2

Contracting Officers Technical Representative (COTR) (Mar 2005)

The Government shall provide the name, address and telephone number of the COTR at the time of contract award and the duties thereby delegated to that person. Any subsequent change to the individual or the individual's responsibilities will be confirmed in writing by the Contracting Officer. In no instance will the COTR be delegated authority to order any change in the contractor's performance which would affect (a) cost or schedule for contracts for services or supplies, or (b) scope, the completion date for intermediate phases or milestones, or overall completion date for contracts for construction.

(End of clause)

#### AOC52.204-6

Capitol Complex Conditions Affecting Contractor Operations (Apr 2008)

Normal Capitol Complex operations are, at irregular and unanticipated times, interrupted due to events that can occur on the Capitol Complex, e.g., funerals that utilize the Rotunda, closure of Congressional buildings due to unusual activities, etc. These events can impact AOC contractor operations. Any AOC contractor that becomes aware of an event that may affect its operations on the Capitol Complex may go to www.aoc.gov/business/contractors to receive current information of the operational status of the Capitol Complex.

(End of clause)

#### AOC52.211-5

Commencement, Prosecution and Completion of Work (Mar 2007)

- (a) All work to be performed under this contract shall be completed within 75 calendar days after the date of contract award. No work under this contract shall be performed on Saturdays, Sundays or Federal holidays and, for work performed in the District of Columbia, Presidential Inauguration Day, except with prior approval of the Contracting Officer.
- (b) Time for completion of the contract work will be adjusted only in accordance with applicable clauses, e.g., Differing Site Conditions, Changes, Changes Supplement, Suspension of Work, or other clauses, as appropriate.

(End of clause)

## AOC52.222-2

Supplemental Wage Determination/rate Request (Sep 2004)

(a) The wage determination or rate, hereby incorporated, does not include the classification, [Elevator Mechanics]. the Contracting

Officer submitted a request for a wage determination or rate to the U.S. Department of Labor, for a decision pertinent to the wage determination or rate applicable to the class of employee utilized in the work herein specified. As of the date of issue of this solicitation, such wage determination or rate has not been received by the Contracting Officer. Upon receipt, a copy of the Department of Labor s action will be forwarded to the contractor by the Contracting Officer.

- (b) In the event that a wage determination or rate is not forthcoming from the Department of Labor prior to the opening of offers, each offeror agrees, by signing and submitting its offer, to be bound to compliance with the pertinent wage determination or rate of the Department of Labor, as eventually promulgated.
- (c) If the action from Department of Labor results in a modification that is an increase to the wage and fringe benefit payments but shall not otherwise include any amount for general and administrative costs, overhead, or profit. The contractor also warrants that the price in this contract does not include any allowance for contingency to cover increased costs for which the adjustment is provided under a modification. In addition, the contractor shall provide, upon request, to the Contracting Officer the originals of any documentation the contractor used when preparing the proposal which will be utilized by the Contracting Officer to ensure that the payment of the adjustment will be for only those hours indicated under the specified category.

(End of clause)

#### AOC52.223-8

## DELIVERY VEHICLE INSPECTION REQUIREMENTS (Apr 2008)

- (a) All vehicles and contents used by the Contractor or his subcontractors which enter or leave United States Government property during performance of work under this contract will be subject to clearance, inspection, and identification procedures conducted by the United States Capitol Police.
- (b) All delivery vehicles carrying fuel, garbage, or similar cargo that cannot be offloaded for inspection and security screening shall utilize the alternative Delivery Access Point located at Third and Maryland Avenue, SW, Washington, DC, for inspection prior to making deliveries to any building within the Capitol Complex, including, but not limited to, the U.S. Capitol Building; the U.S. Botanic Garden; the Hart, Dirksen, and Russell Senate Office Buildings; the Rayburn, Longworth, Cannon, and Ford House Office Buildings; the Thomas Jefferson, John Adams, and James Madison Memorial Library of Congress buildings; the Capitol Power Plant; the Capitol Visitors Center; and the U.S. Supreme Court and Thurgood Marshall Federal Judiciary Buildings.
- (c) 4700 Shepherd Parkway SW inspection facility. All other vehicles making deliveries to the above listed locations except for the U. S. Supreme Court shall utilize the off-site inspection and screening facilities at 4700 Shepherd Parkway SW, Washington, DC 20032.
- (d) For all deliveries within seven calendar days or prior to the first delivery, the contractor shall provide the following information to the U.S. Capitol Police:
- (1) List of drivers;
- (2) Date of birth for each driver;
- (3) Social Security Number of each driver;
- (4) Vehicle make;
- (5) Vehicle model;
- (6) License tag number and state where vehicle is licensed;
- (7) Color of vehicle; and
- (8) Contractor name, if shown on the vehicle.

- (e) Information for deliveries made through the Shepherd Parkway facility must be faxed to (202) 226-0571. For verification of receipt, the contractor may call (202) 226-0905. Updates to the information must be renewed April 30, August 31, and December 31 of each year and provided to the U.S. Capitol Police whenever repetitive deliveries are anticipated.
- (f) Any delivery that does not fall into the before mentioned categories should be coordinated, in advance, with the applicable government point of contact.

#### AOC52.223-5

Special Security Requirements - Services (Jun 2007)

- (a) All vehicles, and contents, used by the Contractor or his subcontractors, which enter or leave United States Government property during performance of the work, will be subject to clearance, inspection and identification procedures conducted by the United States Capitol Police.
- (b) All persons entering the Legislative Branch Buildings shall gain access to the building by passing through x-ray screening devices. In addition, all handbags and all hand-carried items shall be screened by x-ray devices prior to their entry into the building.
- (c) All personnel provided by the Contractor and employed on the site of the work will be subject to a security background investigation. Each employee will be required to fill out an I.D. Request Form and U.S. Capitol Police Request for check of Criminal History Records and each employee will be photographed and fingerprinted. The Contractor shall provide any assistance required by any of its employees in completing the forms.
- (d) Prior to commencement of work, the contractor and all designated on-site employees will be required, on a one-time basis, to be fingerprinted in Washington D.C. The location for the Electronic Fingerprinting Service is the U.S. Capitol Hill Police, Fairchild Building, 499 South Capitol Street SW, Washington, DC 20003.
- (e) Within seven (7) calendar days after the date of contract award, the Contractor shall submit to the Contracting Officer's Technical Representative (COTR) a list of all employees proposed to be employed on this contract. This list shall include the employee's full name, date of birth and social security number.
- (f) While security background investigations are in process, the Contractor's employees must not be granted access to the Capitol Hill complex to perform work or provide services for the AOC unless they are escorted by an AOC staff member. "Escorted" is defined to mean that the AOC staff member will remain with the employee(s) at all times during the performance of the work. Any of the Contractor's employees who are perceived by the Contracting Officer as a security risk as a result of evidence discovered in the background security investigation will not be issued an Identification Card, will be denied access to the site of the work, and the Contractor will be directed to remove such employee from performance of any of the contract work, whether it be on or off the work site. Any contractor employee denied access to the site of work on a contract or task/delivery order as a result of a security investigation may not apply for access to any other AOC/U.S. Supreme Court contract or task/delivery order work site.
- (g) An identification card, with photograph, will be prepared for each employee of the Contractor requiring access to the site. The identification card shall be dated to indicate the period of time for which it is to remain valid from the date the employee reports for duty until the applicable date which occurs first: the expiration of the contract, or the last date of the employee's tour of duty with the Contractor. All contractor personnel must wear the ID badge whenever on the Capitol complex premises or when attending off-site functions on behalf of the AOC. ID badges must be worn in such a manner that contractor personnel can be easily identified as such.
- (h) The Contractor is fully responsible to return:
- (1) The ID badge of any individual employee, including subcontractor personnel, who is removed for any reason including but not limited to illness, or dismissal;
- (2) The ID badges of all contractor employees, including subcontractor personnel, whose performance under the contract is completed in advance of final contract job completion; and
- (3) All outstanding ID badges issued for the contractor and its employees, including subcontractor personnel, within 24 hours of on site contract job completion.
- (i) ID badges are to be hand delivered by the contractor within 24 hours of any of the events listed under (f) above to the Contracting

Officer's Representative.

(j) The Contractor's failure to return any ID badge, access card, or key issued under this contract or order shall result in a deduction of \$100.00 from the contract per ID badge, access card, and/or key not returned.

(End of clause)

#### AOC52.236-11

Submittals (Jun 2004)

- (a) The Contractor shall deliver all required submittals within the times specified elsewhere in this contract. Unless specifically stated otherwise, four (4) sets of each item shall be delivered by the contractor to the Contracting Officer's Technical Representative. An in-depth description of these submittals can be found in the appropriate technical sections of the specification. Any Schedule of Work prepared shall reflect delivery of these items. Failure to provide timely delivery of these submittals may be considered to be grounds for termination for default.
- (b) The Government will review the submittals and either approve them as submitted, or mark required changes on them. If change are required, the Contractor shall deliver revised submittals for approval by the Government which incorporate all of the required changes within two weeks after receipt by the Contractor of the marked-up submittals.

(End of clause)

#### AOC52.242-2

# CONTRACTOR PERFORMANCE EVALUATIONS (DEC 2006)

At the conclusion of contract performance and/or at any point during the performance of this contract, the AOC may elect to evaluate the Contractor and submit a final or interim performance evaluation into the appropriate on-line database designated as the repository of Contractor evaluations for the Federal Government. Any evaluation submitted shall include input from the Contracting Officer's Technical Representative and other agency personnel, as appropriate, and the Contracting Officer. The Contractor shall have the opportunity to review any evaluations and submit supporting information for any differing of positions between the Contractor and the AOC in accordance with the protocol established by the specific on-line database.

(End of clause)

# Representations and Certifications

#### 52.203-2

Certificate of Independent Price Determination (Apr 1985)

- (a) The offeror certifies that--
- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to--
- (i) Those prices;
- (ii) The intention to submit an offer; or
- (iii) The methods or factors used to calculate the prices offered.
- (2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.
- (b) Each signature on the offer is considered to be a certification by the signatory that the signatory-
- (1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; or
- (2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision [insert full name of person(s) in the offeror s organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror s organization];
- (ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) of this provision have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision.
- (c) If the offeror deletes or modifies paragraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of provision)

#### 52.204-3

Taxpayer Identification (Oct 1998)

- (a) Definitions.
- "Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.
- "Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.
- (b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal

Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship

with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.
(d) Taxpayer Identification Number (TIN).
TIN:
TIN has been applied for.
TIN is not required because:
Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
_Offeror is an agency or instrumentality of a foreign government;
Offeror is an agency or instrumentality of the Federal Government.
(e) Type of organization.
Sole proprietorship;
Partnership;
Corporate entity (not tax-exempt);
Corporate entity (tax-exempt);
Government entity (Federal, State, or local);
Foreign government;
International organization per 26 CFR 1.6049-4;
Other
(f) Common parent.
_Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
Name and TIN of common parent:
Name
TIN
(End of provision)
52.209-5
Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters (Dec 2001)
(a)(1) The Offeror certifies, to the best of its knowledge and belief, that
(i) The Offeror and/or any of its Principals
(A) Are are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
(B) Have have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against

them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

- (C) Are \_\_ are not \_\_ presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.
- (ii) The Offeror has \_\_ has not \_\_, within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

#### 52.223-1

Biobased Product Certification (Dec 2007)

As required by the Farm Security and Rural Investment Act of 2002 and the Energy Policy Act of 2005 (7 U.S.C. 8102(c)(3)), the offeror certifies, by signing this offer, that biobased products (within categories of products listed by the United States Department of Agriculture in 7 CFR part 2902, subpart B) to be used or delivered in the performance of the contract, other than biobased products that are not purchased by the offeror as a direct result of this contract, will comply with the applicable specifications or other contractual requirements.

(End of provision)

### AOC52.204-2

Data Universal Numbering System (Duns) Number (Jun 2004)

- (a) The offeror shall enter, in the space provided below, the DUNS number that identifies the offeror s name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet Information Services.
- (b) If the offeror does not have a DUNS number, it should contract Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:
- (1) Company name,
- (2) Company address;
- (3) Company telephone number;

(4) Line of business;		
(5) Chief executive officer/key man	ager;	
(6) Date the company was started;		
(7) Number of people employed by	the company; and	
(8) Company affiliation.		
(c) Offerors located outside the Unit Services office from the Internet hor center, it may send an e-mail to Dun	ne page at http://www.customer	on and phone number of the local Dun and Bradstreet Information rservice@dnb.com. If an offeror is unable to locate a local service nail.dnb.com.
(d) Enter DUNS number:		
(End of provision)		
AOC52.204-3		
Representations and Certifications (	Nov 2004)	
The offeror shall properly execute as in spaces provided as applicable.	nd submit with its offer the Rep	resentations and Certifications contained herein. Insert information
(End of provision)		
AOC52.215-8		
Authorized Negotiators (Jun 2004)		
The offeror represents that following Request for Proposal:	persons are authorized to nego	tiate on its behalf with the Government in connection with this
Name:	Title:	
Telephone:	E-Mail:	
Name:	Title:	
Telephone:	E-Mail:	20
Telephone.	L-Iviaii.	
Name:	Title:	
Telephone:	E-Mail:	
(End of provision)		
AOC52.219-2		
Small Business Representations and	Certifications (Nov 2007)	
(a) If this procurement exceeds \$100,	000 the North American Indust	ry Classification System (NAICS) code for this procurement is
(if this requirement is for services, in	cluding construction).	his requirement is for manufacturing or trade) or \$
(b) The Architect of the Capitol main	tains information on the types of	of contractors to whom contract and order awards are made in portunities in the small business community. Therefore, each its type of entity

(c) Definitions. As used in this provision -"Small business" means a business concern that is organized for profit, has a place of business in the United States, and does not

exceed the size standard for its industry. It may be a sole proprietorship, partnership, corporation, or any other legal entity.

"Service-disabled veteran-owned small business concern" means a small business concern (1) not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and (2) the management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

"Veteran-owned small business concern" means a small business concern (1) not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and (2) the management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern (1) that is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and (2) whose management and daily business operations are controlled by one or more women.

"Large business concern" is an entity that is organized for profit, has a place of business in the United States, and exceeds the size standard for its industry.

"Nonprofit organization" is an entity that is not organized for profit, e.g., the American Red Cross, universities, and foundations. "Foreign contractor" is an entity organized for profit that is not in the United States.

- (d) Small disadvantaged business, women-owned small business, veteran-owned small business, service-disabled veteran-owned small business, and HUBZone small business concerns are subcategories of small business. Small disadvanted business and HUBZone small business concerns require certification by the U.S. Small Business Administration. Additional information is available at http://www.sba.gov.
- (e) For entities organized for profit, the size standards for each industry can be found at http://www.sba.gov/gopher/Government-Contracting/Size/. A business is large if the number of employees or revenue amount exceeds that shown in the applicable industry.

(f) Indicate below the information that best describes your organization and check all categories that apply. For example, if your organization is women-owned and veteran-owned small business, then check "Small Business", Women-owned small business", and

"Veteran-owned small business".

Nonprofit organization (do not check any other box).

Large business (do not check any other box).

Foreign contractor (do not check any other box).

State/local/Federal government agency (do not check any other box).

Small business (see 13 CFR Part 121).

HUBZone small business (see 13 CFR Part 126).

Small disadvantaged business (see 13 CFR 124.1002).

Service-disabled veteran-owned small business (see 38 U.S.C. 101(2) and 38 U.S.C. 101(16)).

Veteran-owned small business (see 38 U.S.C. 101(2)).

Women-owned small business.

(End of provision).

# **Solicitation Conditions**

### 52.211-6

Brand Name or Equal (Aug 1999)

- (a) If an item in this solicitation is identified as "brand name or equal," the purchase description reflects the characteristics and level of quality that will satisfy the Government's needs. The salient physical, functional, or performance characteristics that " equal" products must meet are specified in the solicitation.
- (b) To be considered for award, offers of "equal" products, including "equal" products of the brand name manufacturer, must-
- (1) Meet the salient physical, functional, or performance characteristic specified in this solicitation;
- (2) Clearly identify the item by-
- (i) Brand name, if any; and
- (ii) Make or model number;
- (3) Include descriptive literature such as illustrations, drawings, or a clear reference to previously furnished descriptive data or information available to the Contracting Officer; and
- (4) Clearly describe any modifications the offeror plans to make in a product to make it conform to the solicitation requirements. Mark any descriptive material to clearly show the modifications.
- (c) The Contracting Officer will evaluate "equal" products on the basis of information furnished by the offeror or identified in the offer and reasonably available to the Contracting Officer. The Contracting Officer is not responsible for locating or obtaining any information not identified in the offer.
- (d) Unless the offeror clearly indicates in its offer that the product being offered is an "equal" product, the offeror shall provide the brand name product referenced in the solicitation.

(End of provision)

#### 52.216-1

Type of Contract (Apr 1984)

The Government contemplates award of a firm fixed-price contract resulting from this solicitation.

(End of provision)

# AOC52.204-5

Registration In The Central Contractor Registration (CCR) (Nov 2007)

- (a) The Architect of the Capitol anticipates that in the future the agency's contractors may have to register in the CCR database. This is the primary vendor database for the Executive Branch of the U.S. Federal Government. CCR collects, validates, stores, and disseminates data in support of agency acquisition missions.
- (b) CCR requires vendors to complete a one-time registration to provide basic information relevant to procurement and financial transactions. Vendors must update or renew their registration at least once per year to maintain an active status. CCR validates the vendor information and electronically shares the secure and encrypted data with the Federal agencies' finance offices to facilitate paperless payments through electronic funds transfer (EFT).
- (c) The AOC is now encouraging all vendors to register in the CCR if they have not already done so. Vendors can register on line at http://ccr.gov. This internet site contains all pertinent information for registrration as well as provides contact points for help when registering.

#### AOC52.206-1

Procurement Authority for the Architect of the Capitol (Sep 2007)

The authority for all purchase orders and contracts awarded by the Architect of the Capitol is 41 U.S.C. 5, 41 U.S.C. 6a-1, and 41 U.S.C. 6a-2, as amended by Public Laws 107-68, 108-7, and 108-83.

(End of Provision)

#### AOC52.215-1

Instructions to Offerors (Jul 2007)

(a) Definitions. As used in this provision --

Proposal modification is a change made to a proposal before the solicitation s closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

Proposal revision is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

Time, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays, including Presidential Inauguration Day. However, if the last day falls on a Saturday, Sunday, or legal holiday, including Presidential Inauguration Day, then the period shall include the next working day.

- (b) Offerors are expected to examine the entire solicitation and all instructions. Failure to do so will be at the offeror s risk. Each offeror shall furnish the information required by the solicitation. The offeror will be held responsible for full knowledge of all information contained therein.
- (c) Packaging, transmission, and tracking of proposals. (1) Proposals, modifications, and revisions shall be enclosed, in the quantities specified elsewhere in this solicitation, in sealed envelopes. With each copy of the form entitled, "SOLICITATION, OFFER, AND AWARD", the offeror shall enclose the completed Schedule page; offer guarantee, if required; and Representations and Certifications. Address envelopes to: Architect of the Capitol, Procurement Division, Ford House Office Building, Attn: Patrick Hunt, Room H2-263 Bid Room, Second and D Streets, S.W., Washington, DC 20515. Offeror shall write Bid Documents Enclosed, H2-263 Bid Room, and write the solicitation number, time and date for receipt of offers on the exterior of the package on the same side as the address. Telegraphic or facsimile proposals and modifications will not be considered.
- (2) Current security requirements established by the U.S. Capitol Police to screen mail being delivered to the U.S. Capitol Complex of buildings preclude the use of U. S. Postal Service by offerors to deliver their proposals submitted in response to this solicitation. In addition, because all packages must be screened for security purposes at a central location prior to their delivery, the Architect of the Capitol cannot accept packages containing offers hand carried directly to the Bid Room address within the Ford House Office Building, or any other location in the U.S. Capitol Complex of buildings. See Notice for Delivery on the front of the solicitation.
- (3) To assist in tracking of proposals, offerors are requested to fax a copy of their signed Solicitation, Offer and Award form as well as a copy of the FEDEX or UPS receipt to Patrick Hunt to [(202) 225-3221] at the time of the issuance of their proposal.
- (4) The only acceptable method by which offerors can deliver their responses to this solicitation shall be via Federal Express (FEDEX) or United Parcel Service (UPS). Offers submitted via any other method will be rejected. OFFERORS DO NOT MAIL YOUR OFFER BY REGULAR U.S. MAIL. See notice attached to this solicitation for special instructions.
- (d) Submission, modification, revision, and withdrawal of proposals. (1) Offerors are responsible for submitting proposals and any modifications or revisions so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m. local time, for the designated Government office on the date that the proposal or revision is due.
- (2) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is late and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would no unduly delay the acquisition, and-
- (i) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals;

- (ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government's control prior to the time set for receipt of proposals; or
- (iii) It is the only proposal received.
- (3) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.
- (4) Acceptable evidence to establish the date of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (5) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of proposals by the exact time specified in the solicitation and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.
- (6) Proposals may be withdrawn by written notice received at any time before award. Proposals may be withdrawn in person by an offeror or an authorized representative if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(End of provision)

### AOC52.215-2

Interpretations and Amendments (Jun 2004)

- (a) Any prospective offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing no later than fourteen calendar days prior to the date established for receipt of offers. Oral explanations or instructions given before the award of a contract will not be binding.
- (b) Prospective offerors shall request the Contracting Officer, in writing, via FAX or e-mail for an interpretation or correction of any ambiguity, inconsistency, or error in the contract documents which they may discover or which should have been discovered by a reasonably prudent offeror. Such requests or objections to materials or methods of construction shown or specified shall be directed to the attention of the Contracting Officer at least fifteen (15) calendar days prior to the date specified for receipt of proposals. Written requests shall be transmitted via e-mail to [email address] or via facsimile to [fax number].
- (c) Any interpretations or corrections, as well as any additional modifications the Contracting Officer may desire to include, will be in the form of amendments, in writing, which will be sent on the same date to all offerors if that information is necessary in submitting offers or if the lack of it would be prejudicial to other prospective offerors and shall become a part of any subsequent contract. The Contracting Officer reserves the right to answer only such questions as have, in his opinion, a definite bearing upon the proposals to be submitted.
- (1) Offerors shall acknowledge the receipt of all amendments to the solicitation by:
- (i) Signing and returning the amendment;
- (ii) Identifying the amendment number and date in the space provided for this purpose on the form for submitting a offer;
- (iii) Letter or telegram; or
- (iv) Facsimile, if facsimile offers are authorized in the solicitation.
- (2) The Government must receive the acknowledgment by the time and at the place specified for receipt of offers.
- (d) Requests for oral interpretations or any other interpretations not made by amendments will not be accepted, and any information that may possibly be gained by offerors in that manner is gratuitous and not binding.
- (e) If this solicitation is amended, all terms and conditions that are not amended remain unchanged.

(End of provision)

## AOC52.215-3

Restriction on Disclosure and Use of Data (Jun 2004)

Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall

(a) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets (insert numbers or other identification of sheets); and

(b) Mark each sheet of data it wishes to restrict with the following legend:
Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(End of provision)

### AOC52.215-7

Preparation of Proposals - Construction (Jun 2004)

- (a) Offers shall be submitted, in the quantities as stated elsewhere in this solicitation, on the accompanying printed form entitled, SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair) and copies thereof, with blank spaces suitably filled in. Erasures or other changes on any or all submissions shall be initialed by the signer of the offer.
- (b) Copies of the offer shall be identical and each copy shall give the full business address of the offeror, and be signed by him (see Block 20B of the form entitled, SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair) with his usual signature. Offer by partnerships shall furnish the full names of all partners, and shall be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and designation of the person signing. Offers by corporations shall be signed with the legal name of the corporation, followed by the name of the State of incorporation and by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The name of each person signing shall be typed or printed below the signature. An offer by a person who affixes to his signature the word president, Secretary, agent, or other designation, without disclosing his principal, may be held to be the offer of the individual signing. When requested by the Government, satisfactory evidence of the authority of the offer signing in behalf of the corporation shall be furnished.

(End of provision)

#### AOC52.215-9

Failure to Submit Offer (Jun 2004)

Recipients of this solicitation not responding with a proposal should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements. If a recipient does not submit a proposal and does not notify the issuing office that future solicitations are desired, the recipient s name will be removed from the applicable mailing list.

(End of provision)

#### AOC52.228-7

## AOC52.228-7 OFFER GUARANTEE - CONSTRUCTION (DEC 2006)

- (a) An offer guarantee is required for all offers exceeding \$100,000. For a new definitive contract (one containing no provisions for issuance of task orders) or purchase order, the amount of the offer guarantee is based upon the proposed amount of the offer. For a requirements contract, the offer guarantee is based upon the price payable for the estimated total quantity. For an indefinite-quantity contract, the offer guarantee is based upon the price payable for the specified minimum quantity. The price of any options is not included except for those options exercised at the time of the contract award.
- (b) Failure to furnish an Offer Guarantee in the required form and amount, with and as a part of the proposal, will be cause for rejection of the proposal.
- (c) The offeror shall furnish an Offer Guarantee of not less than 20% of the proposed price in the form of a firm commitment consisting of a Bid Bond, Certified Check, Cashier's Check, Irrevocable Letter of Credit, or Postal Money Order made payable to the Architect of the Capitol, or under Treasury Department Regulations certain bonds or notes of the Unites States. The Contracting Officer will return Offer Guarantees, other than Bid Bonds, (1) to unsuccessful offerors as soon as practicable after evaluation of the

proposals; and (2) to the successful offeror upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the offer as accepted.

(End of provision)

#### AOC52.236-13

Visit to the Site of the Work - Construction (Jun 2004)

- (a) It is strongly recommended that all prospective offerors visit the site where the work is to be performed, compare the work requirements with existing conditions, verify dimensions, if necessary, and fully inform themselves regarding the nature and scope of the proposed work and the conditions under which it will be conducted. Offerors shall also inform themselves regarding other work, if any, being done or to be done by or for the United States government, the District of Columbia government and utility companies, by contract or otherwise, where such work may affect or be affected by the operations under the contract. Failure to take these precautions will in no way relieve the successful offeror from his obligation to furnish all materials, services, labor, and any other requirements necessary to complete the work satisfactorily under the conditions established by the contract documents and without additional expense to the Government.u
- (b) A pre-proposal meeting will be conducted at the U.S. Capitol Washington, D.C. for all prospective offerors on May 22, 2008 at 11:00 a.m. in room HB-15 of the U.S. Capitol Building, Washington, D.C.
- Please contact M.r. Patrick G. Hunt at phunt@aoc.gov to register for the conference. (c) The Architect will conduct one field inspection of the work immediately following the pre-proposal meeting. Those intending to participate shall meet at the address above. Information concerning the meeting may be obtained by telephoning Mr. Patrick Hunt at 202-226-1933.
- (d) Offerors are encouraged to submit all questions in writing at least five (5) working days prior to the conference. Questions will be considered at any time prior to or during the conference; however, offerors will be asked to confirm verbal questions in writing. Subsequent to the conference, an amendment to the solicitation containing an abstract of the questions and answers, and a list of attendees, will be disseminated.
- (e) Offerors are cautioned that, notwithstanding any remarks or clarifications given at any site visit, the pre-proposal conference or field inspection, all terms and conditions of the solicitation remain unchanged unless they are changed by amendment to the solicitation. If the answers to conference questions, or any solicitation amendment, create ambiguities, it is the responsibility of the offeror to seek clarification prior to submitting a offer.

(End of provision)

### 52.225-10

Notice of Buy American Act Requirement--Construction Materials (May 2002)

- (a) Definitions. "Construction material," "domestic construction material," and " foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act -Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).
- (b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.
- (c) Evaluation of offers.
- (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.
- (2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.
- (d) Alternate offers.

- (1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.
- (2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.
- (3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested -
- (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
- (ii) May be accepted if revised during negotiations.

(End of provision)

### AOC52.215-4

Contract Award (Jun 2004)

- (a) The Government will evaluate offers in response to this solicitation without discussions and will award a contract to the responsible offeror whose offer, conforming to the solicitation, will be most advantageous to the Government considering only price and the price-related factors specified elsewhere in the solicitation. Therefore, the offeror s initial proposal should contain the offeror s best terms from a price standpoint. The Government reserves the right to conduct discussions.
- (b) The Government may
- (1) Reject any or all offers;
- (2) Accept other than the lowest offer; and
- (3) Waive informalities or minor irregularities in offers received.
- (c) The Government may accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the offer.
- (d) A written award or acceptance of offer mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (c) of this clause), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. Negotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.
- (e) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, inaccurate, or not current.
- (f) The Government may determine that an offer is unacceptable if the prices proposed are materially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(End of provision)

## **DIVISION 1 - GENERAL REQUIREMENTS**

# PART 1 - GENERAL

# 1.1 DESCRIPTION OF REQUIREMENTS:

- A. General Requirements: The provisions or requirements of Division-1 apply to entire work of Contract and, where so indicated, to other elements which are included in project, and include, but are not limited to the following:
  - 1. Summary of the Work.
  - 2. Project Coordination.
  - 3. Definitions and Standards.
  - 4. Schedules, Reports, and Payments.
  - 5. Submittals.
  - 6. Temporary Facilities and Controls.
  - 7. Products.
  - Project Closeout.

### 1.2 SUMMARY OF THE WORK:

# A. Project/Work Identification:

- General: Project name is "Modernization of Elevator S-4 Capitol Building," Washington, D.C., as shown on the Contract Document prepared by the Architect of the Capitol.
- 2. Summary by Reference: Work of the Contract can be summarized by references to the SCHEDULE, GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, Official Procedure for Making Changes in Contracts, Specification Sections, Drawings, Amendments, and Modifications to the contract documents issued subsequent to the initial printing of this Project Manual and including, but not necessarily limited to, printed material referenced by any of these.
- 3. **Abbreviated Written Summary**: Briefly and without force and effect upon the contract documents, the work of the Contract can be summarized as follows:
  - a. The Work includes modernization of electrical/mechanical systems as well as material upgrades a single traction elevator. Work will include the installation of new electrical and mechanical components, car controls, hall stations, refurbishing hoistway entrances, new solid state drive, refurbishing of car interior and systems for communication and monitoring of the elevator.

#### B. Contractor Use of Premises:

- 1. **General**: The Contractor shall limit his use of the premises to the work indicated, so as to allow for the Government's occupancy and use by the public.
- 2. Contractor Use of the Existing Building: During the construction period the site and the building will be occupied by Members of Congress, other Government employees and the general public. Maintain the existing building in a safe and weather-tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the

construction period. Cooperate fully with the Architect or his representative during construction operations to minimize conflicts and to facilitate Government usage.

- a. Clear Passage: Keep public areas such as hallways, stairs, elevator lobbies and toilet rooms free from accumulation of waste material, rubbish or construction debris. Materials, tools, hoists, scaffolding and other equipment may not be placed in the hallways, stairways, and elevator lobbies beyond designated areas without prior written permission of the Architect.
- b. **Smoking or open fires** will not be permitted within the building enclosure or on the premises.
- c. Use of Existing Elevators: Refer to Article, Temporary Facilities and Controls, for designation of elevators available for use of Contractor's personnel. Use of other than designated elevators will not be permitted.
- 3. Limitations on Use of the Site: Limitations on site usage as well as specific requirements that impact site utilization are indicated on the Drawings and by other Contract Documents. Portions of the site beyond areas on which work is indicated are not to be disturbed. In addition to these limitations and requirements, administer allocation of available space among entities needing both access and space so as to produce the best overall efficiency in performance of the total work of the project. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.
  - a. Unless designated for sole Contractor use, keep existing driveways and entrances serving the premises clear and available to the Government and its employees at all times.
  - Maintain driveways between and around combustible material storage piles of at least 15' wide and free of accumulation of rubbish, equipment and materials.
     Maintain access for fire fighting equipment and emergency vehicles.
  - c. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the designated areas. If additional storage is necessary, obtain and pay for such storage off-site.
- Construction Parking Control: Parking space for personal vehicles is not available on the site. Obtain approval of Architect for parking of construction motor vehicles or other equipment on the site.
- C. Blasting: The use of any kind or type of explosive in the performance of the work is prohibited, except the use of construction tools actuated by or employing powder-actuated charges which shall be permitted, provided that the tool is of the kind and design ordinarily used for such construction and that the Architect has authorized its use after determining that its use will not endanger human life or safety.
- D. Mechanical/Electrical Requirements of General Work: Except as otherwise indicated, comply with applicable provisions of The National Electrical Code (NEC) and standards by National Electrical Manufacturer's Association (NEMA) for electrical components of general work. Where applicable, provide products listed and labeled by nationally recognized independent testing and labeling organizations.

### 1.3 PROJECT COORDINATION:

- A. Continuously coordinate the work of subcontractors to insure proper processing and progress of the work. Require each subcontractor to examine work of other trades and all sections of specifications to assure satisfactory installation of, and connection between, his work and work of other trades.
  - Provide other parties, to the extent their work is affected by this work, all information
    necessary for the proper execution of their work. Arrange and conduct work so that other
    parties may complete their work at the site according to schedule. All work under this
    contract shall be carefully coordinated with work under other such Contracts.
  - The Contractor shall maintain a complete set of Contract Documents on the site during the execution of this Contract. All Drawings and Specifications shall be posted with the latest information and Changes.
  - 3. **Benchmarks**: Work from lines and levels established by measured shop drawings, establish and maintain bench marks and other dependable markers. Establish bench marks and markers to set lines and levels for work at each story of construction and elsewhere as needed to accurately and properly locate each element of the project.
- B. Demolition Work, and other work which will produce noise, smoke, or odors, must be performed outside of standard working hours and coordinated with Government personnel. Refer to Division 14 Section MODERNIZATION OF TRACTION ELEVATORS for additional coordination requirements.

### C. General Installation Provisions:

- Pre-Installation Meetings: Hold a pre-installation meeting at the project site well before
  installation of each unit of work which requires coordination with other work. Installer
  and representatives of the manufacturers and fabricators who are involved in or affected
  by that unit of work, and with its coordination or integration with other work that has
  preceded or will follow, shall attend this meeting. Advise Architect of scheduled meeting
  dates.
- 2. Installer's Inspection of Conditions: Require the Installer of each major unit of work to inspect the substrate to receive work and conditions under which the work is to be performed. The Installer shall report all unsatisfactory conditions in writing to the Contractor. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.
- 3. Manufacturer's Instructions: Where installations include manufactured products, comply with the manufacturer's applicable instructions and recommendations for installation, to the extent that these instructions and recommendations are more explicit or more stringent than requirements indicated in the Contract Documents.
- 4. Mounting Heights: Where mounting heights are not indicated, mount individual units of work at industry recognized standard mounting heights for the particular application indicated. Refer questionable mounting height choices to the Architect for final decision.
  - a. **Mount units of work** required to be accessible to handicapped people at heights prescribed by the Uniform Federal Accessibility Standards as referenced by the Americans with Disabilities Act (ADA).

- D. Cleaning and Protection: During handling and installation of work at the project site, clean and protect work in progress and adjoining work on the basis of continuous maintenance. Apply protective covering on installed work where it is required to ensure freedom from damage or deterioration at time of completion.
  - Clean and perform maintenance on installed work as frequently as necessary through remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
  - 2. Limiting Exposures of Work: To the extent possible through reasonable control and protection methods, supervise performance of the work in such a manner and by such means which will ensure that none of the work, whether completed or in progress, will be subjected to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period.
    - a. Protect against possible damage all sills, jambs and soffits of permanent openings used as passageways or through which materials are handled. Protect exposed corners, spandrels, projecting features and similar permanent work subject to damage. Cover and protect all prefinished work from damage by mortar, plaster, gypsum drywall compounds, paint, and other construction materials and operations. Use wheelbarrows equipped with rubber tires over permanently exposed floors and paving.
  - Load all trucks leaving the site with loose debris in a manner that will prevent dropping
    of materials on streets. Fasten suitable tarpaulins over the load before they enter
    surrounding paved streets.
- E. Cutting and Patching: Where the Contractor must cut, patch, alter, add to, repair or refinish existing construction and finishes which are not to be removed, he shall leave such construction and finishes complete and in satisfactory condition. Cutting, patching, and the like shall be neatly and carefully performed, and new materials and methods shall match existing corresponding work unless otherwise indicated. Exposed patches and repairs shall be as inconspicuous as possible.
  - Construction, finishes, equipment and other items which are damaged or defaced by reason of work performed under this contract shall be restored to the satisfaction of the Architect.
- F. Conservation and Salvage: It is a requirement for supervision and administration of the work that construction operations be carried out with the maximum possible consideration given to the conservation of energy, water and materials. In addition, maximum consideration shall be given to salvaging materials and equipment involved in performance of the work but not incorporated therein. Refer to other sections for required disposition of salvage materials which are the Government's property.
  - Archaeological Rights: There is a possibility that items of archaeological significance
    may be found during the excavation of the site. In such event, the Contractor shall stop
    excavation in the vicinity of the find and notify the Architect immediately; subsequent
    excavation work shall proceed as directed by the Architect. All items found which are
    considered to have archaeological significance are the property of the Government.

## 1.4 DEFINITIONS AND STANDARDS:

- A. General: Comply with governing regulations and the codes and standards imposed upon the work. These requirements include the obtaining of permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with regulations, codes and standards.
- B. Definitions: A substantial amount of specification language consists of definitions for terms found in other contract documents, including the drawings. (Drawings must be recognized as diagrammatic in nature and not completely descriptive of the requirements indicated thereon). Certain terms used in contract documents are defined in this article. Definitions and explanations contained in this section are not necessarily either complete or exclusive, but are general for the work to the extent that they are not stated more explicitly in another element of the contract documents.
  - Concealed: The term "concealed" is defined as an item or space not normally seen, occupied or used by building occupants or staff, such as shafts, hoistways, tunnels, ceiling plenums, attics, and crawls spaces.
  - 2. **Exposed**: The term "exposed" is defined as an item or surface, exterior or interior, which can be seen by a person outside the building or a person inside a usable space within the building during normal activity.
    - a. Mechanical and electrical rooms, air handling rooms, storage rooms and penthouses shall be considered to have exposed surfaces, as shall the mechanical and electrical construction within them.
    - b. The interiors of closets and alcoves shall be considered exposed surfaces, and shall be finished to match the finish of the adjoining room or space, unless another finish is otherwise indicated.
    - c. The interiors of cabinets shall be considered exposed, but a finish different from that of the exterior may be permitted or required by other sections.
  - Finished Space: The term "finished space" is defined as space normally used by the public, building occupants or staff for primary functions of the building, but does not include mechanical, electrical and elevator equipment rooms, hoistways, tunnels or mechanical penthouses, unless otherwise indicated.
  - 4. **Furnish**: Except as otherwise defined in greater detail, the term "furnish" is used to mean supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.
  - 5. Indicated: The term "indicated" is a cross-reference to graphic representations, notes or schedules on drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used in lieu of "indicated," it is for the purpose of helping the reader locate cross-reference, and no limitation is intended except as specifically noted.
  - 6. Install: Except as otherwise defined in greater detail, the term "install" is used to describe operations at the project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations, as applicable in each instance.

- 7. Installer: The term "installer" is defined as the entity (person or firm) engaged by the Contractor, its subcontractor or sub-subcontractor for performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (installers) be expert in the operations they are engaged to perform.
- 8. **Provide**: Except as otherwise defined in greater detail, the term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.
- 9. Specialist: The term "specialist" is defined as an individual or firm of established reputation (or, if newly organized, whose personnel have previously established a reputation in the same field), which is regularly engaged in, and which maintains a regular force of workers skilled in either (as applicable) manufacturing or fabricating items required by the contract, installing items required by the contract, or otherwise performing work required by the contract. Where the contract specification requires installation by a specialist, that term shall also be deemed to mean either the manufacturer of the item, an individual or firm licensed by the manufacturer, or an individual or firm who will perform the work under the manufacturer's direct supervision.
- 10. **Testing Laboratory**: The term "testing laboratory" is defined as an independent entity engaged to perform specific inspections or tests of the work, either at the project site or elsewhere, and to report, and (if required) interpret results of those inspections or tests.
- C. Format and Specification Content Explanations: Bolding and underscoring: Are used strictly to assist reader of specification text in scanning text for key words (for quick recall). No emphasis on or relative importance is intended where bolding and underscoring are used. Imperative language is used generally in specifications. Except as otherwise indicated, requirements expressed imperatively are to be performed by the Contractor. For clarity of reading at certain locations, contrasting subjective language is used to describe responsibilities which must be fulfilled indirectly by Contractor, or when so noted, by others.
  - 1. Abbreviations: The language of specifications and other contract documents is of the abbreviated type in certain instances, and implies words and meanings which will be appropriately interpreted. Actual word abbreviations of a self-explanatory nature have been included in texts. Specific abbreviations have been established, principally for lengthy technical terminology and primarily in conjunction with coordination of specification requirements with titles of general standards which are frequently abbreviated. Singular words will be interpreted as plural and plural words will be interpreted as singular where applicable and where full context of the contract documents so indicates.
  - 2. Minimum Quality/Quantity: In every instance, the quality level or quantity shown or specified is intended as minimum for the work to be performed or provided. Except as otherwise specifically indicated, actual work may either comply exactly with that minimum (within specified tolerances), or may surpass the quality of that minimum within reasonable limits. In complying with requirements, indicated numeric values are either minimum or maximums as noted or as appropriate for context of requirements. Refer instances of uncertainty to the Architect for decision before proceeding.
- D. Overlapping and Conflicting Requirements: Where there appears to be overlapping or conflicting requirements in the drawings and specifications, the order of precedence established as follows:
  - 1. **Order of Precedence:** Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:

- a. The Schedule (excluding the specifications).
- b. Representations and other instructions.
- c. Contract clauses.
- d. The Specifications.
- The Drawings. Large scale drawings take precedence over small scale drawings.
   Do not scale drawings.
- 2. Industry Standards: Where compliance with 2 or more industry standards or sets of requirements is specified, and overlapping of those different standards or requirements establishes different or conflicting minimums or levels of quality, the most stringent requirement is intended and will be enforced, unless specifically detailed language written into contract documents clearly indicates that a less stringent requirement is to be fulfilled. Refer apparently-equal-but-different requirements, and uncertainties as to which level of quality is more stringent, to the Architect for a decision before proceeding.
- Contractor's Options: Except for overlapping or conflicting requirements, where more
  than one set of requirements are specified for a particular unit of work, Options are
  intended to be the Contractor's regardless of whether or not it is specifically indicated as
  such.
- E. **Drawing Symbols**: Except as otherwise indicated, graphic symbols used on drawings are those symbols recognized in the construction industry for purposes indicated. Where not otherwise noted, symbols are defined by "Architectural Graphic Standards", published by John Wiley & Sons, Inc., Ninth edition.
  - Mechanical/Electrical Drawings: Graphic symbols used on mechanical and electrical
    drawings are generally aligned with symbols recommended by ASHRAE. Where
    appropriate, these symbols are supplemented by more specific symbols as recommended
    by other recognized technical associations including ASME, ASPE, IEEE and similar
    organizations. Refer instances of uncertainty to the Architect for clarification before
    proceeding.
- F. Industry Standards: Except to the extent that more explicit or more stringent requirements are written directly into contract documents, applicable standards of the construction industry have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies were bound herein, subject to the order of precedence previously stated.
  - 1. **Publication Dates:** Except as otherwise indicated, where compliance with an industry standard is required, conform to the standard in effect on the date of the Invitation for Bids, or, if referred to in any amendments, at the date of such amendments.
  - 2. Abbreviations and Names: The following acronyms or abbreviations as referenced in contract documents are defined to mean the associated names. Both names and addresses are subject to change, and are believed to be, but are not assured to be, accurate and up-to-date as of the date of contract documents:

AA Aluminum Association www.aluminum.org

(202) 862-5100

ACIL American Council of Independent Laboratories www.acil.org

(202) 887-5872

AISC	American Institute of Steel Construction www.aisc.org	(800) 644-2400 (312) 670-2400
ANSI	American National Standards Institute www.ansi.org	(202) 293-8020
ASME	American Society of Mechanical Engineers www.asme.org	(800) 843-2763
ASTM	American Society for Testing and Materials www.astm.org	(610) 832-9585
AWI	Architectural Woodwork Institute www.awinet.org	(800) 449-8811 (703) 733-0600
AWS	American Welding Society www.aws.org	(800) 443-9353 (305) 443-9353
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The www.ieee.org	e) (212) 419-7900
NAAMM	National Association of Architectural Metal Manufacturer www.naamm.org	rs (312) 332-0405
NECA	National Electrical Contractors Association www.necanet.org	(301) 657-3110
NEII	National Elevator Industry, Inc. 400 Frank W. Burr Blvd. Teaneck, NJ 07666	(201) 928-2828
NEMA	National Electrical Manufacturers Association www.nema.org	(703) 841-3200
NFPA	National Fire Protection Association www.nfpa.org	(800) 344-3555 (617) 770-3000
SSPC	The Society for Protective Coatings www.sspc.org	(877) 281-7772
UL	Underwriters Laboratories, Inc. www.ul.com	(800) 704-4050 (847) 272-8800

# G. Federal Requirements and Standards:

ADA American Disabilities Act (ADA): Except as otherwise indicated, comply with "American Disabilities Act" (ADA) (Fed. Reg./Vol. 56, No. 144/Part 36).

CFR Code of Federal Regulations

(6742)

Available from Government Printing Office (888) 293-6498 www.access.gpo.gov/nara/cfr (202) 512-1530 Occupational Safety and Health Administration (800) 321-OSHA www.osha.gov

# SCHEDULES, REPORTS, AND PAYMENTS:

OSHA

- A. Coordination: Coordinate both the listing and timing of reports and other activities required by provisions of this and other sections, so as to provide consistency and logical coordination between the reports. Maintain coordination and correlation between separate reports by updating at monthly or shorter time intervals. Make appropriate distribution of each report and updated report to all parties involved in the work including the Architect.
- В. Material Schedule: Submit for approval three (3) copies of the product-listing schedule prior to commencement of the Work, including the names of manufacturers and the trade names or numbers of all materials proposed for use on the project. Provide a written explanation for omissions of data, and for known variations from contract requirements. Do not use any material until approved by the Architect. Upon request, furnish samples of materials, without cost to the Government, for examination and testing.
- C. Schedule of Values: Within twenty (20) calendar days of the date of contract award, a Schedule of Values shall be submitted. This schedule is defined as a work item by work item breakdown of cost of each definitive work activity including Contractor's markup. The Schedule of Values shall be maintained current throughout the life of the contract and shall be updated monthly to reflect the percentage of work completed under each work item.
  - 1. The Grand Total of all of the line items in the Schedule of Values shall equal the Contract Amount.
- D. Progress Schedule: Within thirty (30) calendar days of the date of contract award, the Contractor shall prepare and submit for approval his proposed Progress Schedule for performing the work. At a minimum, the schedule should include the level of detail that is included in the Schedule of Values. The Progress Schedule shall also include the date(s) that each elevator will be taken out of service, the time period each elevator will be under construction, date of inspection and when the elevator will be returned to service. The schedule should indicate that all work of the contract, including training, submission of record documents and the like, will be completed within the period of performance specified in the Contract SUPPLEMENTARY CONDITIONS. The Progress Schedule will be used in conjunction with the Schedule of Values in determining the value of completed work.
  - 1. If the progress of the work of the contract falls behind schedule, the Contractor shall revise his Progress Schedule so that the work will be completed within the period of performance. Also, if the contractor's plan for performing the work changes, for whatever reason, he shall revise his Progress Schedule and submit it for approval.
- E. Permits, Licenses, and Certificates: For the Government's records, submit copies of utility permits, licenses, certifications, utility inspection reports, releases, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in

conjunction with compliance with standards and regulations bearing upon performance of the Work.

#### 1.6 SUBMITTALS:

- A. General: Shop drawings, product data, samples and other work-related submittals are required to amplify, expand and coordinate the information contained in the Contract Documents. The Contractor is responsible for all dimensions, for the design of adequate or proper components, connections and other items, for the inclusion in the work of all elements and incidental details, and for the satisfactory fabrication, construction, operation and coordination of the work.
  - Approval of any submission shall not be construed as a complete or precise check of the
    item submitted but will only indicate that the general methods of design, detailing,
    construction or other elements under consideration appear to be satisfactory, without
    specific determinations or particulars.
  - 2. Changes to the Contract will not be made by notations on submittals. In the event submittals returned by the Architect with notations, which in the opinion of the Contractor, constitute additional work for which he is entitled to an adjustment in the contract sum or the contract time, the Contractor shall comply with the procedure set forth in Article, "Changes," of the GENERAL CONDITIONS.
  - 3. **Do not permit** submittal copies without an appropriate final "Action" marking by the Architect to be used in connection with the work.
- B. Submittal Procedures: Make all submittals to the Architect or to an individual designated by the Architect.
  - Only the Architect or an individual designated by the Architect can approve or disapprove submittals. Deviations and variations from the contract requirements contained in the submittal can be approved only by the Architect or by an individual delegated such authority by the Architect.
  - 2. Costs associated with transmittal of submittals shall be borne by the Contractor.
  - 3. Review Time: Except as specified elsewhere, allow for a review period of thirty (30) calendar days after receipt of the submittals by the Architect. Advise the Architect on each submittal, as to whether processing time is critical to the progress of the work, and if work would be expedited if processing time could be shortened. No extension of time will be authorized because of the Contractor's failure to transmit submittals or resubmittals to the Architect sufficiently in advance of the work. For submittals of items requiring coordination between different trades or subcontractors, review time period starts from the time that all required submittals have been received by the Architect.
  - 4. Preparation of Submittals: Provide permanent marking on each submittal to identify project, date, Contractor, subcontractor, supplier, manufacturer, submittal name and similar information to distinguish it from other submittals. Label as to number and title of specification section, drawing number and detail references, as appropriate. Show Contractor's executed review and approval marking and provide space of not less than 20 sq. in. for the Architect's "Action" marking. Package each submittal appropriately for transmittal and handling. Submittals which are received from sources other than through the Contractor's office will be returned without action.

- C. Specific Submittal Requirements: Specific submittal requirements for individual units of work are specified in the applicable specification section. Except as otherwise indicated in the individual specification sections, comply with the requirements specified herein for each type of transmittal.
  - 1. **Product Data**: Collect required product data into a single submittal for each unit of work or system. Mark each copy to show which choices and options are applicable to the project. Where product data has been printed to include information on several similar products, some of which are not required for use on the project, or are not included in this submittal, mark the copies to show clearly that such information is not applicable. The Architect needs four (4) copies of product data for our files/use. The Contractor shall submit as many additional copies as he would like returned, up to a total of six (6), which are in addition to the Architect's four (4).
  - 2. Shop Drawings: Provide special notation of dimensions that have been established by field measurement. Highlight, encircle or otherwise indicate deviations from the Contract Documents on the shop drawings.
    - a. **Preparation**: Submit newly prepared information, drawn to accurate scale on sheets not less than 8-1/2" x 11"; except for actual pattern or template type drawings, the maximum sheet size shall not exceed 36" x 48". Indicate the name of the firm that prepared each shop drawing and provide date and appropriate project identification in the title block. One (1) correctable 1-1/2 mil translucent polyester reproducible print and two (2) blue-line or black-line prints shall be submitted; reproducible will be returned.
      - Do not reproduce contract documents or copy standard printed information as the basis of shop drawings.
      - Use standard architectural scales for all drawings and include a graphic scale on each sheet.
    - b. Equipment and Systems: Shop Drawings for equipment and systems shall show ratings (where applicable), and how components are assembled, how they function together, and how they will be installed. Shop drawings, product data, certificate of conformance or compliance, certified test or inspection reports, and other submittals for equipment, systems, and their component parts shall be coordinated and submitted as a unit. Multiple or piecemeal submissions are not acceptable except where prior approval is obtained from the Architect, in which case a list of data to be submitted later shall be included with the first submission.
  - 3. **Samples**: Documentation required specifically for sample submittals includes a generic description of the sample, the sample source or the product name or manufacturer, and compliance with governing regulations and recognized standards. In addition, indicate limitations in availability, sizes, delivery time, and similar characteristics.
    - a. Preparation: Where possible provide samples that are physically identical with the proposed material or product to be incorporated in the work; provide full scale, fully fabricated samples cured and finished in the manner specified. Where variations in color, pattern, or texture are inherent in the material or product represented by the sample, submit not less than 3 units of the sample, which show the full range of

- variations. Where samples are specified for the Architect's selection of color, texture or pattern, submit a full set of available choices for the material or product. Mount, display, or package samples in the manner specified to facilitate the review of indicated qualities. Prepare samples to match the Architect's sample where so indicated.
- b. **Submittal**: Submit 3 sets of samples in the final submittal, one set will be returned. If the submittal is for the Architect's selection of color, pattern, texture or similar characteristics from a manufacturer's standard range of choices, only a single set of samples is required for a preliminary submittal. The final submittal may then be limited only to those choices selected by the Architect for final incorporation into the Work.
- c. Mock-Ups and similar samples specified in individual work sections are special types of samples. Comply with sample submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

#### 4. Miscellaneous Submittals:

- a. Inspection and Test Reports: Classify each inspection and test report as being either "shop drawings" or "product data" depending on whether the report is specially prepared for the project, or a standard publication of workmanship control testing at the point of production. Process inspection and test reports accordingly.
- b. Warranties: Refer to Article "Products" for specific general requirements on warranties, product bonds, workmanship bonds and maintenance agreements. In addition to copies desired for the Contractor's use, furnish two (2) executed copies of such warranties, bonds or agreements. Provide two (2) additional copies where required for maintenance manuals.
- Closeout Submittals: Refer to Article "Project Closeout" and to individual sections of these specifications for specific submittal requirements of project closeout information, materials, tools, and similar items.
- D. Architect's Action: The Architect will stamp each submittal with a uniform, self-explanatory action stamp. The action will be as outlined below. Where the submittal must be held for coordination, the Architect will so advise the Contractor without delay.
  - 1. **If no changes** to the submittal are required, the number of copies outlined above will be returned to the Contractor, bearing the stamp of the Architect, stating "APPROVED".
  - 2. If changes to the submittal are required, but are of such minor nature that fabrication and/or construction can proceed in accordance with the correction noted by the Architect without resubmission the number of copies outlined above will be returned to the Contractor bearing the Stamp of the Architect stating "APPROVED AS NOTED". The Contractor shall proceed with fabrication and/or construction in accordance with the Architect's corrections, and resubmit corrected copy for the Architect's records.
  - 3. If changes to the submittal are required, but are of such nature that fabrication or construction cannot proceed, the number of copies outlined above will be returned to the Contractor, bearing the stamp of the Architect stating "REVISE AND RESUBMIT." In such a case, the Contractor shall resubmit the drawings, properly corrected. Upon resubmission of shop drawings, if any corrections or changes are made other than those marked by the Architect, the Contractor shall clearly indicate any such corrections or changes made on his own initiative.

- 4. If the product does not meet the specification requirements, the number of copies outlined above will be returned to the Contractor, bearing the stamp of the Architect stating "REJECTED." In such a case, the Contractor shall submit a new product which complies with the technical specifications.
- Other Action: Where the submittal is returned, marked with the Architect's explanation, for special processing or other Contractor activity, or is primarily for information or record purposes, the submittal will be marked as "NO ACTION."

## 1.7 TEMPORARY FACILITIES AND CONTROLS:

- A. **Description of Requirements**: This article specifies administrative and procedural requirements for temporary services and facilities, including such items as temporary utility services, temporary construction and support facilities, and project security and protection.
  - Use Charges: No cost or usage charges for temporary services or facilities are chargeable
    to the Government. Cost or use charges for temporary services or facilities will not be
    accepted as a basis of claims for a change-order extra. All materials and equipment
    provided by the Contractor for temporary facilities shall remain the property of the
    Contractor.
  - 2. Materials and Execution: Provide new materials and equipment for temporary services and facilities; used materials and equipment that are undamaged and in serviceable condition may be used, if acceptable to the Architect. Provide only materials and equipment that are recognized as being suitable for the intended use, by compliance with appropriate standards. Do not use materials of temporary service in permanent installation.
- B. Quality Assurance: Comply with the requirements of the District of Columbia Building Code and regulations governing construction and local industry standards, in the installation and maintenance of temporary services and facilities.
  - Standards: Comply with the requirements of NFPA Code 241, "Building Construction and Demolition Operations", the ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and the NECA National Joint Guideline NJC-6 "Temporary Job Utilities and Services".
    - a. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", as prepared jointly by Associated General Contractors of America (AGC) and American Specialty Contractors, Inc. (ASC) for industry recommendations.
    - b. Trade Jurisdictions: The assigned responsibilities for the installation and operation of temporary utilities are not intended to interfere with the normal application of trade regulations and union jurisdictions applicable to the work.
  - 2. **Inspections**: Inspect and test each service before placing temporary utilities in use. Arrange for required inspections and tests by governing authorities, and obtain required certifications and permits for use.

- C. Job Conditions: Provide each temporary service and facility ready for use at each location when the service or facility is first needed to avoid delay in performance of the Work. Maintain, expand as required and modify temporary services and facilities as needed throughout the progress of the Work. Do not remove until services or facilities are no longer needed, or are replaced by the authorized use of completed permanent facilities.
  - Maintain temporary construction and support facilities in such a manner as to prevent discomfort to users. Take necessary fire prevention measures. Maintain temporary support facilities in a sanitary manner so as to avoid health problems and other deleterious effects.
- D. Temporary Utilities: The Architect will designate a connection point for installation of temporary service to the project to existing service. Arrange with the Architect for an acceptable time when service can be interrupted, where necessary to make connections for temporary services.
  - 1. **Temporary Electric Power Service**: Electrical energy (110v and 220v)will be supplied by the Government, but the Contractor shall install and maintain all necessary conduit, wiring, and devices needed to execute the work. Install all wiring in flexible conduit or armored cable with minimum No. 12 gage wire. Portable cords for small power tools shall be properly grounded and installed as approved by the Architect. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment. The Government will not be held responsible for power outages beyond its control.
    - a. Comply with applicable NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service, including those requirements included in the Project Manual.
  - 2. Temporary Lighting: Provide general service incandescent lamps of wattage indicated or required for adequate illumination. Protect lamps with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations. Provide exterior fixtures where fixtures are exposed to weather or moisture. Keep sockets equipped with active lamps. Where feasible, utilize fluorescent type fixtures.
  - 3. Temporary Heating, Cooling and Ventilating: Provide temporary heating, cooling, and ventilating where indicated or needed for performance of the Work, curing or drying of recently installed work or for protection of work in place from adverse effects of low temperatures or high humidity. Select facilities known to be safe and without deleterious effect upon the work in place or being installed. Coordinate with ventilation requirements to produce the indicated ambient condition required, to minimize the consumption of fuel or energy, and to comply with code requirements. Do not store fuel in the building.
  - 4. **Temporary Telephones**: Provide cellular service to the contractor's site superintendent. Location of telephones and telephone wires is subject to Architect's approval.
  - 5. Temporary Sanitary Facilities: Use of the designated existing Government toilet facilities will be permitted, provided these facilities are properly cleaned and maintained in a condition acceptable to the Government. Immediately prior to Final Acceptance, restore these facilities to the condition prevalent at the time of initial use. Do not clean tools or equipment in building toilet rooms.

- 6. Temporary Fire Protection: Install and maintain temporary fire protection facilities of the types needed to adequately protect against reasonably predictable and controllable fire losses. Comply with applicable recommendations of NFPA Standard 10 "Standard for Portable Fire Extinguishers." Locate fire extinguishers where they are most convenient and effective for their intended purpose, but provide not less than one extinguisher on each floor at or near each usable stairwell. Store combustible materials in clearly-labeled containers in recognized fire-safe locations.
  - a. Maintain an adequate safeguard on the site for a period of thirty (30) minutes following the cessation of welding or burning operations, including but not limited to after completion of work at end of shift, lunch breaks and temporary work.

# E. Temporary Construction and Support Facilities:

- Construction Aids: Design, construct, and maintain construction aids and miscellaneous
  general services and facilities as needed to accommodate performance of the work.
  Construction aids and miscellaneous general services and facilities include, but are not
  limited to the following:
  - a. Provide temporary stairs where ladders are not adequate for performance of work, and until permanent stairs are available. Cover finished permanent stairs which will be exposed to occupants' use, with a durable protective covering of plywood or similar material so that finishes will be undamaged at the time of acceptance.
  - b. **Provide scaffolds** as required for proper execution of the Work. Remove or relocate scaffolds promptly to avoid interference with other trades.
  - c. Provide adequate guardrails and barriers at perimeters of each level of construction as work progresses in accordance with District of Columbia requirements and in conformance with requirements of the Special Conditions.
  - d. **Provide adequate facilities** for hoisting materials and employees. Do not permit employees to ride hoists which comply only with requirements for hoisting materials. The Contractor is responsible for selection of type, size and number of facilities. Truck cranes and similar devices used for hoisting are considered as being "tools and equipment" and not temporary facilities.
    - Temporary Elevator Use: The Senate Superintendent will designate an
      elevator which may be used by the Contractor. The Contractor will not have
      exclusive use of the elevator; the Government and general public will share
      use.
  - e. **Hoists and Chutes**: Do not permit free dropping of materials, rubbish or debris, but remove by use of material hoist and/or rubbish chute. Locations of all hoists and chutes are subject to approval by the Architect.
    - Protect building from use of hoists and chutes to prevent damage, marring or staining of permanent work. Brace and guy securely and provide safety devices as required by code.
- Project Signage: No signs, other than safety signs, may be erected on the site unless specifically indicated otherwise.

- F. Security and Protection Facilities: Provide and maintain all necessary barricades, lights, and other safeguards for the protection of Members of Congress, Government employees, Contractor's employees and the general public from injury. Protect materials and work on the site, whether incorporated in the work or not, against damage or loss from any cause.
  - Provide a reasonably neat and uniform appearance in security and protection facilities acceptable to the Architect.
  - 2. Barricades and Fences: Comply with recognized standards and code requirements for the erection of substantial, structurally adequate barricades where needed to prevent accidents and losses. All barricades shall be fire-retardant treated and painted with appropriate colors, graphics and warning signs to inform personnel at the site and the public, of the hazard being protected against.
  - 3. Security Enclosure and Lockup: Install substantial, durable, and fire-retardant general temporary enclosure of partially completed areas of construction. Provide locking entrances adequate to prevent unauthorized entrance, vandalism, theft and similar deleterious effects and violations of project security. Provide 2 sets of access keys to the United States Capitol Police.

# G. Temporary Controls:

- Traffic Control: Plan vehicular access methods, locations and timing of deliveries in a
  manner to minimize interference with street and pedestrian traffic and to conform to
  District of Columbia regulations. Do not block or obstruct public streets, driveways and
  walkways adjacent to the site at any time during performance of the work without proper
  authorization. Do not permit trucks of any kind to use existing sidewalks without prior
  authorization of the Architect.
- 2. Collection and Disposal of Wastes: Establish a system for daily collection and disposal of waste materials from construction areas and elsewhere on the site. Enforce requirements strictly. Do not hold collected materials at the site longer than 7 days during normal weather or 3 days when the daily temperature is expected to rise above 80 deg. F. Handle waste materials that are hazardous, dangerous, or unsanitary separately from other inert waste by containerizing appropriately. Dispose of waste material in a lawful manner.
  - a. Burying or burning of waste materials on the site will not be permitted.
  - b. Washing waste materials down sewers or into waterways will not be permitted.
  - c. Provide rodent proof containers located on each floor level of construction work, to encourage depositing of garbage and similar wastes by construction personnel.
- Janitorial Services: Provide daily janitorial services for temporary offices, first aid stations, toilets, wash facilities, lunchrooms and similar areas. Require users of other temporary facilities to help maintain a clean and orderly premises.
- 4. Dust Control: During periods of construction activity creating dust conditions sprinkle periodically the site areas disturbed by Contractor's operation or treat with dust suppressors to control dust. Dry power brooming will not be permitted. Use vacuuming, wet mopping, wet sweeping or wet power brooming. Air blowing will be permitted only for cleaning non-particulate debris. Use only wet cutting procedures for unit masonry and concrete.

- 5. **Noise Control**: Avoid the use of tools and equipment that produce harmful noise. Restrict the use of noise making tools and equipment to hours of use that will minimize noise complaints from persons or firms near the project site. Coordinate such work with the Architect and the Senate Superintendent's Office.
- 6. **Environmental Protection**: Provide general protection facilities, operate temporary facilities, conduct construction activities, and enforce strict discipline for personnel on the site in ways and methods that comply with environmental regulations, and that minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result from the performance of work at the site.
- H. Installation, Operation, Termination and Removal: Use qualified tradesmen for installation of temporary services and facilities. Locate temporary services and facilities where they will serve the entire project adequately and result in minimum interference with the performance of the Work.
  - Supervision: Limit availability of temporary services and facilities to essential and intended uses to minimize waste and abuse. Do not permit temporary installations to be abused or endangered. Do not allow hazardous, dangerous or unsanitary conditions to develop or persist on the project site.
  - Maintenance: Operate and maintain temporary services and facilities in good operating
    condition throughout the time of use and until removal is authorized. Protect from
    damage by freezing temperatures and similar elements.
  - 3. Termination and Removal: Unless the Architect requests that it be maintained for a longer period of time, remove each temporary service and facility promptly when the need for it or a substantial portion of it has ended, or when it has been replaced by the authorized use of a permanent facility, or no later than substantial completion. Repair damaged work, clean exposed surfaces and replace work which cannot be satisfactorily repaired. Contract Time includes the time required for final cleanup of premises.
    - Immediately prior to final acceptance, clean and renovate permanent services and facilities that have been used to provide temporary services and facilities during the construction period.

#### 1.8 PRODUCTS:

- A. General: Refer to Article, "Materials and Workmanship," of the GENERAL CONDITIONS. After execution of the Contract, the Contractor's requests for changes in the products, materials, equipment and methods of construction required by the Contract Documents are considered requests for "contract modifications," and are subject to the requirements specified in Architect of the Capitol, "Official Procedure for Making Changes in Contracts." Revisions to the contract documents, where requested by the Architect are considered as "Changes" not substitutions.
- B. Quality Assurance: Compatibility of products is a basic requirement of product selection. When the Contractor is given the option of selecting between two or more products for use on the project, the product selected must be compatible with other products previously selected, even if the products previously selected were also Contractor options. The complete compatibility between various choices available to the Contractor is not assured by the various requirements of the Contract Documents, but must be provided by the Contractor. Provide a single product for each required product selection, regardless of whether that product selection

is provided by more than one sub-contractor. Do not alter product brands or series for a given product selection during the life of the contract without written approval of the Architect.

- 1. **Source Limitations**: To the fullest extent possible and subject to the restrictions of the "Buy American Act," provide products of the same generic kind, from a single source, for each unit of work.
- C. Product Delivery, Storage, and Handling: Deliver, store, and handle products in accordance with manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft. Control delivery schedules to minimize long-term storage at the site and to prevent overcrowding of construction spaces, and to ensure minimum holding or storage times for items known or recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration or loss.
  - Deliver products to the site in the manufacturer's sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  - 2. **Store products** at the site in a manner that will facilitate inspection and measurement of quantity or counting of units, and in conformance with manufacturer's instructions.
  - 3. **Store heavy materials** away from the project structure in a manner that will not endanger the supporting construction.
- D. General Product Compliance: Requirements for individual products are indicated in the Contract Documents; compliance with these requirements is in itself a contract requirement. These requirements may be specified in any one of several different specifying methods, or in any combination of these methods.
  - Procedures for Selecting Products: The Contractor's options in selecting products are limited by requirements of the Contract Documents and governing regulations. They are not controlled by industry traditions or procedures experienced by the Contractor on previous construction projects.
    - a. Performance Specification Requirements: Where the specifications require compliance with indicated performance requirements, provide products that comply with the specific performance requirements indicated, and that are recommended by the manufacturer for the application indicated. The manufacturer's recommendations may be contained in published product literature, or by the manufacturer's individual certification of performance. General overall performance of a product is implied where the product is specified for specific performances.
    - b. Compliance with Standards, Codes and Regulations: Where the specifications require only compliance with an imposed standard, code or regulation, the Contractor has the option of selecting a product that complies with specification requirements, including the standards, codes and regulations.
    - c. Visual Matching: Where matching an established sample is required, the final judgement of whether a product proposed by the Contractor matches the sample satisfactorily will be determined by the Architect. Where there is no product that matches the sample satisfactorily and also complies with other specified requirements, comply with the provisions of the Contract Documents concerning

- "changes" for the selection of a matching product in another product category, or for non-compliance with specified requirements.
- d. Visual Selection: Except as otherwise indicated, where specified product requirements include the phrase "...as selected from the manufacturer's standard colors, patterns, textures..." or similar phrases, the Contractor has the option of selecting the product and manufacturer, provided the selection complies with other specified requirements. The Architect is subsequently responsible for selecting the final color, pattern and texture from the product line selected by the Contractor.
- E. General Product Requirements: Provide products that comply with the requirements of the contract documents and that are undamaged and, unless otherwise indicated, unused at the time of installation. Provide products that are complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
  - 1. **Provide products** that are essentially the standard catalogued products of manufacturers regularly engaged in production of such products and that are the manufacturer's latest standard design that complies with the specification requirements. Equipment shall essentially duplicate items that have been in satisfactory commercial and industrial use at least two years, or more if otherwise specified, prior to bid opening; or in lieu thereof shall have been used and operated in a test installation which, in the opinion of the Architect, duplicate its field performance for the same period of time. The Architect reserves the right to require the Contractor to submit evidence to this effect for his approval. When two units of the same class of equipment are required, these units shall be the product of a single manufacturer; however, the component parts of the system need not be the products of the same manufacturer.
  - Provide standard, domestically produced products for which the manufacturer has
    published assurances that the products and its parts are likely to be available to the
    Government at a later date.
  - 3. Nameplates: Except as otherwise indicated for required labels and operating data, do not permanently attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view either in occupied spaces or on the exterior of the completed project.
- F. Installation of Products: Except as otherwise indicated in individual sections of these specifications, comply with the manufacturer's instructions and recommendations for installation of the products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other work. Clean exposed surfaces and protect surfaces as necessary to ensure freedom from damage and deterioration at time of acceptance.

## 1.9 PROJECT CLOSEOUT:

A. Definitions: "Project Closeout" is the term used to describe certain collective project requirements, indicating completion of the work that are to be fulfilled near the end of the Contract Time in preparation for final acceptance and occupancy of the Work by the Government, as well as final payment to the Contractor and the normal termination of the Contract.

- Time of closeout is directly related to "Final Acceptance." Therefore, the time of
  closeout may be either a single time period for the entire Work or a series of time periods
  for individual elements of the Work that have been certified as substantially complete at
  different dates. This time variation, if any, shall be applicable to the other provisions of
  this Division.
- B. **Final Cleaning**: Special cleaning requirements for specific units of Work are included in the appropriate sections of Division 2 through 16. General Cleaning during the regular progress of the Work is required by the GENERAL CONDITIONS and is included under Article "Temporary Facilities and Controls."
  - 1. **Cleaning**: Provide final cleaning of the Work at the time indicated. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of work to the condition expected from a normal, commercial building cleaning and maintenance program. Comply with the manufacturer's instructions for operations.
    - Complete the following cleaning operations before requesting the Architect's inspection for Final Acceptance.
    - b. Remove labels which are not required as permanent labels.
    - c. Clean transparent materials, including mirrors and glass in doors and windows, to a polished condition. Remove putty and other substances which are noticeable as vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
    - d. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of dust, stains, films and similar noticeable distracting substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.
    - e. **Wipe surfaces** of mechanical and electrical equipment clean. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and provide new lamps.
    - f. Clean the project site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas to a broom clean condition; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
  - 2. **Pest Control**: Engage an experienced exterminator to make a final inspection of the project, and to rid the project of rodents, insects and other pests.
  - 3. **Compliance**: Comply with safety standards and governing regulations for cleaning operations. Remove waste materials from the site and dispose of in a lawful manner.
    - a. Where extra materials of value remaining after completion of associated work have become the Government's property, salvage or dispose of these materials to the Government's best advantage as directed.
- C. Record Document Submittals: Specific requirements for record documents are indicated in the individual sections of these specifications. Other requirements are indicated in the GENERAL CONDITIONS. General submittal requirements are indicated in the various "Submittals" articles of individual sections of the Project Manual.

- Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect's reference during normal working hours.
- 2. Record Documents: Maintain a record set of blue or black line white-prints of contract drawings and shop drawings in a clean, undamaged condition. Mark-up the set of record documents to show the actual installation where the installed work varies substantially from the work as originally shown. Mark whichever drawing is most capable of showing the actual "field" condition ("as-built" condition) fully and accurately; however, where shop drawings are used for mark-up, record a cross-reference at the corresponding location on the working drawings. Give particular attention to concealed work that would be difficult to measure and record at a later date.
  - a. **Mark record sets** with red erasable pencil and, where feasible, use other colors to distinguish between variations in separate categories of work.
  - b. **Note related** change-order numbers where applicable.
  - c. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
  - d. Materials and Tools: Refer to individual sections of the Project Manual for required quantities of spare parts, extra and overrun stock, maintenance tools and devices, keys, and similar physical units to be submitted.
  - e. **Record the** date of each revision recorded in the Title Block or in a uniform location for each sheet.
- D. Maintenance Manuals: Organize operating and maintenance data into suitable sets of manageable size. Bind data into individual binders properly identified and indexed. Bind each set of data in a heavy-duty 2-inch, 3-ring vinyl-covered binder, with pocket folders for folded sheet information. Mark the appropriate identification on both front and spline of each binder.
- E. Warranties and Bonds: At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
  - Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl
    covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to
    receive 8-1/2" by 11" paper.
    - a. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
    - b. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS," the Project title or name, project number, and the name of the Contractor.
  - When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

- F. General Operating and Maintenance Instructions: Arrange for each installer of operating equipment and other work that requires regular or continuing maintenance, to meet at the site with the Government's personnel to provide necessary basic instruction in the proper operation and maintenance of the entire Work. Where installers are not experienced in the required procedures, include instruction by the manufacturer's representatives.
- G. Closeout Submittals: Prior to requesting Final Inspection, submit the following:
  - Project Record Documents, properly annotated and in the format required.
  - 2. Copies of Warranties and Bonds.
  - 3. Operation and Maintenance data.
  - 4. All required operating or special tools required in individual sections.
  - 5. All required keys and keying schedules.
- H. Prerequisites to Final Acceptance: Complete the following before requesting the Architect's final inspection for certification of final acceptance, and final payment as required by the GENERAL CONDITIONS. List known exceptions, if any, in the request.
  - Submit the final payment request with final releases and supporting documentation not
    previously submitted and accepted. Include certificates of insurance for products and
    completed operations where required.
  - 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
  - Submit a certified copy of the Architect's final punch-list of itemized work identified to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance and has been endorsed and dated by the Architect.
  - 4. **Submit final meter readings for utilities**, a measured record of stored fuel, and similar data either as of the date of substantial completion, or else when the Government took possession of and responsibility for corresponding elements of the Work.
  - 5. Submit consent of surety.
- I. Reinspection Procedures: The Architect will reinspect the Work upon receipt of the Contractor's notice that the work, including punchlist items resulting from earlier inspections, has been completed, except for these items whose completion has been delayed because of circumstances that are acceptable to the Architect.
- J. Removal of Protection: Except as otherwise indicated or requested by the Architect, remove temporary protection devices and facilities which were installed during the course of the work to protect previously completed work during the remainder of the construction period.

END OF SECTION 01000

# SECTION 028213 - ASBESTOS ABATEMENT PROCEDURES

### PART 1 - GENERAL

# 1.1 DESCRIPTION OF WORK:

- A. General: This section includes required procedures necessary to reduce air concentrations of asbestos to the specified level and maintain the specified asbestos control limits that is mandated during the life of the contract. It also includes procedures for the encapsulation, removal, containment, and disposal of asbestos containing materials.
  - 1. Work Area: The work areas include the following:

Elevator Cab No. S-4 Elevator Machine Room No. S-4.

- 2. The following asbestos containing materials are to be removed:
  - Removal and disposal of all asbestos insulation within the work area.
  - b. The work shall be performed within a negative air containment.
  - c. All measurements are approximate and are to be verified by the contractor.

### 1.2 QUALITY ASSURANCE:

## A. Definitive Responsibility Criteria:

- 1. Qualifications For the Asbestos Abatement Contractor:
  - a. Asbestos Abatement Experience: Provide the name and location of at least five (5) prior asbestos abatement projects, successfully performed by the selected Asbestos Abatement Contractor, that are comparable in scope of work, structure, project costs and in complexity. For each project include the name and current telephone number of the project's contract representative. Address how each project is comparable in scope of work, structure, project costs and complexity.
  - b. Project Documents: Provide copies of the daily logs and air monitoring reports including final clearance sample results, for the five abatement projects submitted in response to the preceding paragraph.
  - c. Pollution Liability Insurance: Submit proof of Pollution Liability Insurance coverage. If the completion date of the bid project is beyond the effective dates of the Pollution Liability Insurance coverage, then the selected contractor shall submit a statement stating it is understood, that this Pollution Liability Insurance coverage, shall remain in effect throughout the duration of this contract.
  - d. Federal/State EPA and OSHA citations: Provide a list all federal and State EPA or OSHA citations the Contractor has received in the last five (5) years.

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- Qualifications for the Supervisor / Competent Person: Provide the name and experience record of the proposed Supervisor/Competent Person and foreman, the selected Asbestos Abatement Contractor, will assign to this project. Provide evidence that the proposed Supervisor/Competent Person has supervised at least five (5) asbestos abatement contracts of comparable scope and complexity.
  - Accreditation: Provide evidence that shows the proposed Supervisor/Competent Person, is accredited as an asbestos Contractor/Supervisor as described in 40 CFR Part 763 (EPA's Model Accreditation Plan).
- Qualifications for the Certified Industrial Hygienist (CIH): Provide the name and experience record of the CIH selected to perform the duties outlined in "Project Certified Industrial Hygienist" below. Provide evidence showing that, in the last five years, the selected CIH has performed abatement oversight on projects of comparable scope and complexity. The project CIH shall be an employee independent of the asbestos abatement contractor.
  - a. Certification, Accreditation and Training: Provide evidence documenting that the selected CIH:
    - Is certified in Comprehensive Practice by the American Board of Industrial Hygiene (ABIH)
    - Is currently accredited as an Asbestos Building Inspector, Contractor/Supervisor, and Project Designer as described in 40 CFR Part 763.
    - 3) If the CIH will be reading Phase Contrast Microscopy (PCM) samples: has successfully completed the National Institute of Occupational Safety and Health (NIOSH) 582 course Sampling and Evaluating Airborne Asbestos Dust or equivalent; is currently registered in the American Industrial Hygiene Association's (AIHA) Asbestos Analytical Registry; and participates in their Proficiency Analytical Testing (PAT) certification program or participates in a qualified quality control program including PAT rounds.
  - b. Errors and Omissions Insurance: Provide evidence showing the Project CIH has Errors and Omissions Insurance coverage. If the completion date of the project is beyond the effective dates of the insurance coverage, submit documentation stating that the CIH(s) Errors and Omissions Insurance coverage will be kept current and in effect for the duration of the project.
- 4. Qualifications for the Industrial Hygienist (IH): Name of and experience record of the Industrial Hygienist(s) (IH), the CIH selects, who are qualified by virtue of their training and work experiences, to perform duties assigned by the CIH. Show experience on 5 projects of comparable scope and complexity, that the IH has overseen in the last five years. Provide evidence documenting that:

- The selected IH is currently Accredited as an asbestos building inspector, Contractor/Supervisor, and Project Designer as described in 40 CFR Part 763.
- b. The selected IH has successfully completed the NIOSH 582 course Sampling and Evaluating Airborne Asbestos Dust or equivalent and is currently registered in the American Industrial Hygiene Association's (AIHA) Asbestos Analytical Registry.
- c. The selected IH currently participates in their (PAT) certification program or in a qualified quality control program including PAT rounds.
- 5. **Testing Laboratory Qualifications:** Proof of qualifications of testing laboratory and personnel as follows:
  - a. Accreditation: Provide proof of accreditation by the AIHA for asbestos analysis, and the NIST under National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos analysis.
  - b. Proficiency: Provide the two most recent consecutive quarterly reports showing the laboratory analyzing the samples has been judged proficient by successful participation in the NIOSH's PAT certification and Bulk Asbestos Proficiency Analytical Testing (ELPAT) programs.
  - c. Laboratories and Microscopists: Provide proof the laboratory(s) selected to analyze project samples is accredited by the American Industrial Hygiene Association (AIHA), holds appropriate state license and successful participation of the laboratory in the Proficiency Analytical Testing (PAT) Program. For microscopists to analyze fibers-in-air samples on site, provide proof that they have been judged by current inclusion on the AIHA Asbestos Analyst's Registry (AAR) or other qualified quality control program.
  - d. Errors and Omissions Insurance: Provide evidence showing the laboratory has Errors and Omissions Insurance coverage. If the completion date of the project is beyond the effective dates of the insurance coverage, submit documentation stating that the laboratory's Errors and Omissions Insurance coverage will be kept current and in effect for the duration of the project.
- B. Contractors performing asbestos abatement work for the Architect of the Capitol in the District of Columbia are required to be licensed to do asbestos work in the District of Columbia. The Contractor shall comply with the licensing regulations of:

Government of the District of Columbia Department of Consumer and Regulatory Affairs (DCA) Environmental Regulation Administration 51 N Street NE 5th Floor Washington, DC 20002

C. Contractor employees assigned to active asbestos work areas in the District of Columbia must be licensed by the District of Columbia as trained asbestos workers and supervisors. The Abatement Personnel shall have completed the EPA AHERA/OSHA abatement worker/supervisor course; have training on the standard operating procedures of the Abatement Contractor; have one year of asbestos abatement experience; have applicable medical and respiratory protection documentation; have certificate of training and State accreditation/license.

- D. Asbestos Control Limits: The enclosed work areas shall be defined as a regulated area in accordance with 29 CFR 1910.1001 and 29 CFR 1926.1101.
  - Inside Asbestos Work Area: For personnel wearing negative-pressure respirators, air concentrations of asbestos shall not exceed an 8-hour time weighted average of 0.1 fibers (longer than 5 microns), per cubic centimeter of air as determined by the NIOSH 7400 method. Regardless of respiratory protection worn, air concentrations inside the work area will not exceed an 8-hour time weighted average of one (1) fiber per cubic centimeter as determined by the NIOSH 7400 method. In the event that this level is exceeded, all work in the asbestos work area shall stop and may not restart until fiber levels are below an 8-hour time weighted average of one (1) fiber per cubic centimeter as determined by the NIOSH 7400 method. It is the responsibility of the Contractor to provide an independent industrial hygiene consultant to provide the required personal air monitoring and to assure that all safety and health procedures are followed.
- E. Project Certified Industrial Hygienist (Project CIH): The primary Contractor shall engage the services of a CIH certified in Comprehensive Practice by the American Board of Industrial Hygiene (ABIH) for the period of this contract. Selection of the Project CIH is subject to approval of the Architect. This person is responsible for all environmental oversight of this contract. Although contracted by the General Contractor, the Project CIH is responsive to the Architect. During the contract period, the Project CIH is required to be on call and to be on project site within two hours after notification by the Architect. Additionally, the Project CIH will arrange for another Architect approved CIH, to be a backup, to cover duties assigned under this specification, in the event that the selected Project CIH is not able to be on site as required or cannot report to the project site within the allotted 2 hours. Responsibilities for the Project CIH include but shall not be limited to the following:
  - 1. Coordination meeting. Immediately after selection the Project CIH will contact the Architect to schedule a coordination meeting. Suggested attendees to this meeting are: the AOC Construction Manager, a representative of the AOC/SOHB, and a representative of the AOC jurisdiction where the work is being performed. The purpose of this coordination meeting is to establish a clear working knowledge of the project and the responsibilities of the Project CIH with the Architect's staff.
  - 2. Certify, that prior to beginning any abatement activity, all personnel is trained in accordance with OSHA 29 CFR 1926.1101 (k)(9) and any additional State/Local requirements. Training must include, at a minimum, the elements listed at 29 CFR 1926.1101 (k)(9)(viii). Training shall have been conducted by a third party, EPA/State approved trainer meeting the requirements of EPA 40 CFR 763 Appendix C (AHERA MAP). Provide copies of the initial training certificates and all refresher taken to date.
  - 3. Certify that medical examinations meeting the requirements of 29 CFR 1926.1101 (m) are provided for all personnel working in the regulated area, regardless of exposure

levels. The physician's written opinion as required by 29 CFR 1926.1101 (m)(4) shall be provided for each person and shall include in the opinion the person has been evaluated for working in a heat stress environment while wearing personal protective equipment and is able to perform the work.

- 4. Review, approve and submit for review to the Architect:
  - a. **All asbestos abatement plans** of action for conformance to applicable referenced standards and this specification.
  - b. **All submittals** (except initial submittal of contractor qualification information) the Contractor submits under paragraph 1.4.
  - c. All sampling data within the time frames outlined in this specification.
- 5. **Review**, approve and submit to the Architect for review all required Material Safety Data Sheets (MSDS) submitted by the Contractor.
- 6. **Inspect and or oversee** the inspection of, asbestos abatement removal work for conformance with the approved plan.
- 7. **Develop and submit** for review a daily monitoring plan to test airborne levels of asbestos to determine exposure levels. The plan will include all personal, area, and final air samples to be used to clear a containment area.
- 8. **Perform daily monitoring** in accordance with the approved plan.
- 9. Ensure all work is performed in strict accordance with this specification at all times.
- 10. **Ensure hazardous exposure** to personnel and to the environment are adequately controlled at all times.
- The Project CIH or designated IH shall visually inspect and approve all asbestos
  containment areas before asbestos containing materials are removed and before
  performing any final air tests.
- 12. At the direction of the AOC/SOHB, the Project CIH shall investigate possible contaminations and contamination related complaints. The Project CIH, shall perform any necessary sampling and/or site investigations in order to develop findings and conclusions of the reported incidence. Submit a verbal report that outlines all findings of the investigation to the AOC/SOHB within 24 hours of the initial notice. Submit a final written report to the AOC/SOHB within 3 work days of the initial notice.
- 13. With the approval of the Architect the Project CIH may select IH (s) to perform duties assigned by the Project CIH. The selected IH (s) shall be under the direct supervision of the Project CIH, who will be responsible for IH(s) job performance, and will review and approve all results of their work. The selection of IH (s) shall be based on their training and work experiences and will be subject to the approval of the Architect.
- 14. PPE: Establish the Personal Protective Equipment (PPE) daily.
- F. **Project Competent Person**: The abatement contractor shall assign a competent person as defined in 29 CFR 1926.1101, as a person who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures to eliminate them. This person shall meet the criteria outlined in paragraph 1.2.A.2, of this specification and is required to

be on site supervising the work. Responsibilities for the Project Competent Person include but shall not be limited to the following:

- 1. **Comply with** the requirements outlined in 29 CFR 1926.1101, paragraph (o) *Competent Person*.
- 2. Follow the requirements outlined by the Project CIH.
- 3. **Limit access** to the abatement area by permitting only authorized personnel and personnel listed in "Access to Work Area" below to enter.
- 4. **No employee** shall be allowed to wear a respirator unless a physician has determined they are capable of doing so and has issued a written opinion for that person.
- 5. All personnel wearing respirators shall have a current qualitative/quantitative fit test which was conducted in accordance with 29 CFR 1910.134 (f) and Appendix A. Fit tests shall be done for PAPRs with the blower off.
- 6. The Competent Person shall assure that the positive/negative fit check is done each time the respirator is donned by an employee. Head coverings must cover respirator head straps. Any situation that prevents an effective face piece to face seal as evidenced by failure of a fit check shall preclude that person from wearing a respirator until resolution of the problem.
- 7. **Maintain** a daily log of all persons who enter and exit the work area until the containment is authorized for removal.
- 8. **Working** with the project CIH, ensure that all documents are filed in the final report due three days after the containment is authorized for removal.
- 9. **Ensure** that only personnel with current EPA accreditation and DC asbestos license, perform abatement work in the work area.

## 1.3 REFERENCES:

# A. American National Standards Institute (ANSI) Publication:

 Z9.2-79 - Fundamentals Governing the Design and Operation of Local Exhaust Systems

# B. American Society for Testing and Materials (ASTM) Publication:

 E 849-82 - Safety and Health Requirements relating to Occupational Exposure to Asbestos

## C. Code of Federal Regulations (CFR):

- 29 CFR 1910.1001, Occupational Safety and Health Act (OSHA), INCLUDING Appendix A through I.
- 2. 29 CFR 1910.20, Subpart C, General Safety and Health Provisions.
- 3. 29 CFR 1910.134, OSHA General Industry Respirator Requirements.
- 4. 29 CFR 1926.1101. Occupational Exposure to Asbestos, Construction Industry Standard, INCLUDING Appendix A through K.

5 40 CFR Part 61, Subpart M: U.S. Environmental Protection Agency, National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos.

## D. State and Local Regulations:

Applicable state and local regulations shall apply.

# E. Architect of the Capitol

- 1. The Architect of the Capitol's Uniform Asbestos Management Program.
- 2. Other special requirements listed by the AOC.

#### 1.4 SUBMITTALS:

- A. General: Transmit all submittals to the Architect for review.
- B. Initial Submittal of Asbestos Abatement Contractor or Subcontractor Qualification Information: Items 1 through 3 below are to be submitted as a complete package after the bid receipt, but are required to be reviewed by the AOC Safety and Occupational Health Branch (AOC/SOHB) prior to Notice to Proceed.
  - Asbestos Abatement Contractor or Subcontractor Qualification Information:
     Submit for review, the name, address, telephone number and required documentation of qualifications of the Asbestos Abatement Contractor or Subcontractor, selected for this contract.
  - 2. **Certified Industrial Hygienist (Project CIH):** Submit name, address, telephone number and required documentation of qualifications of the independent Certified Industrial Hygienist selected to perform the duties outlined in 1.2.E above.
  - 3. **Experience and Qualifications of Supervision:** Submit name of and required documentation of qualifications of the proposed competent person who would be assigned to this project, as outlined in "Definitive Responsibility Criteria" above.
- C. Post-Award Asbestos Abatement Submittal: Items listed below are to be submitted after the award, but are required to be reviewed and recommended approved, by the Project Certified Industrial Hygienist (CIH) prior to submission to the Safety and Occupational Health Branch or his designated representative. These actions must be completed prior to starting work.
  - Experience and Qualifications of Workers: Name and experience record, if any, of
    workmen who will be assigned to this project. Include for each person evidence of
    successful completion of State of Maryland or Commonwealth of Virginia training
    given by qualified personnel. Provide certification that employees meet the OSHA
    medical surveillance requirements.
  - 2. License Information: Provide a copy of a current District of Columbia Asbestos Contractor's License and Individual Asbestos License for asbestos projects in the District of Columbia.

- 3. CIH Approved Plan of Action: Before start of work submit the design and layout of the regulated area and the negative air machines. The submittal shall be prepared by a certified asbestos project designer and shall indicate the number of, location of, and size of negative air machines. The point(s) of exhaust, air flow within the regulated area, anticipated negative pressure differential, and supporting calculations for sizing shall be provided. In addition, submit the following:
  - a. Manufacturer's information on the negative air machine(s).
  - b. Method of supplying power to the units and designation/location of the panels.
  - c. Description of testing method(s) for correct air volume and pressure differential.
  - d. Provide manufacturer's product data on the pressure differential measuring device used.

There will be 4 air exchanges required with minus 0.02 inch of water pressure differential. The plan must include the location and layout of each containment and decontamination areas, the sequencing of asbestos work, the interface of trades involved in the performance of work, methods to be used to assure the safety of building occupants and visitors to the site. The plan must explain the use of portable HEPA ventilation systems, identify the means of isolating the building's HVAC system during removal operations, detail the method of removal to prohibit emissions into the work area, and identify the method of packaging the asbestos waste. No locally exhausted HEPA filtered drills or saws shall be used as the sole means of containment of drilling or cutting asbestos-containing materials unless prior approval is given by the AOC/SOHB.

- 4. **Project CIH Approved Area Sampling Plan:** Submit a detailed plan which shows the proposed air sampling strategy to be used to comply with the requirements specified. This plan must be separate from the CIH approved plan of action. Show all locations where sampling will occur during the asbestos abatement operation.
- Temporary Storage of Containerized Asbestos Waste: Submit a request to the AOC, requesting a location for temporary storage of containerized asbestos waste that is generated by this project.
- 6. Project CIH Approved Disposal Plan: Submit to the Architect a disposal plan including the location of the approved disposal site and the contractor's method for documenting proper asbestos disposal. Detail the methods by which the containerized asbestos waste is taken from the work area to the temporary storage area.
- 7. **IH qualifications:** Submit the name and required documentation of qualifications of the proposed IH (s) for this project.
- 8. NESHAP Notification Requirements: The contractor shall coordinate with the AOC/SOHB or designated Jurisdictional point of contact, in submitting the appropriate written notification. Any costs incurred due to expiration of the EPA NESHAP notice before completing assigned abatement work will be at the expense of the Contractor. For the purpose of this contract, initial and all changes to the initial notification shall be postmarked by the appropriate addressee below, at least 10 working days and 35 calendar days respectively, prior to the start of asbestos abatement work:
  - a. Ten (10) working days prior to beginning asbestos abatement work notify:

U. S. Environmental Protection Agency Region III Pesticides/Asbestos Programs and Enforcement Branch Mail Code: 3WC32 1650 Arch Street Philadelphia, PA 19107

And

District of Columbia Department of Health Air Quality Division 51 N Street NE Washington, DC 20002 Phone: (202) 535-2259 FAX Number 202-535-1371

Thirty Five (35) days prior to beginning asbestos abatement work notify:

AOC, Safety and Occupational Health Branch (AOC/SOHB) Ford House Office Building Room HOB2-553 Washington DC 20515 Phone: (202) 225-4043 FAX NUMBER (202) 226-9915

And the affected AOC Building Superintendent to satisfy the District of Columbia's building occupant asbestos abatement notification requirement.

- b. Changes to the original NESHAP Notification: Any changes to the original notification, shall be coordinated with the AOC/SOHB prior to submission. After this coordination, the Contractor shall submit changes to the original notification, pursuant to the NESHAP requirements, within the time frames specified and to the appropriate jurisdiction listed above.
- c. Emergency NESHAP Notices: The Contractor, shall contact the AOC/SOHB, for procedures regarding the submission of any emergency notifications, pursuant to the NESHAP requirements.
- AOC Asbestos Project Number: Contact the AOC/SOHB at 202-225-4043 for this number. This Asbestos Control Number will be used in all documents concerning this project.
- 10. Certificates of Compliance: RESERVED
- 11. **Information on Encapsulating Material:** Submit written evidence that material meets the the specified characteristics and the latest requirements of the EPA.
- 12. **Laboratory Qualification Information:** Submit proof of required qualifications of testing laboratory and their personnel. See "Testing Laboratory Qualifications".

- 13. Containers For Disposal of Friable Asbestos: Submit for review, the manufacturers cut sheet for the bags and containers the contractor intends to use to dispose of the asbestos containing material. Bags shall be minimum of 6 mil polyethylene (or equivalent) and labeled in accordance with 40 CFR Part 61 subpart M (NESHAP) and 29 CFR 1926.1101.
- 14. **Decontamination Facility:** Unless otherwise specified by the AOC/SOHB, throughout the time that asbestos abatement is taking place, the Asbestos Abatement Contractor will maintain a working three-stage decontamination facility at the point of access to the containment. As a minimum, the decontamination facility will consist of a clean changing area, an air space, a shower, another air space, and a contaminated changing area. The size and location of this facility shall be reviewed by the AOC/SOHB.
- Sequencing/Scheduling: Submit for review, the sequencing and/or scheduling for each containment or containments being performed under this contract, to the AOC/SOHB.
- 16. **Filtering for vacuums and exhaust equipment** shall conform to ANSI Z9.2. HEPA filters shall be used in all vacuums and exhaust equipment. All HEPA filtered vacuums and exhaust equipment shall be tested for integrity with a Dioctylphthalate (DOP) or Dioctylsubacate (DOS) smoke generator. Submit evidence showing that all HEPA filtered vacuums and exhaust equipment, scheduled for use under this Contract, have been tested and passed an DOP or DOS smoke generator.
- 17. **Negative Air Machines:** All negative air machines used on this project shall have affixed to its outer cabinet a label certifying its acceptance under OSHA's Nationally Recognized Testing Laboratory program (NRTL).
- 18. **HEPA Filter Replacement:** If any HEPA filtered vacuums or ventilation equipment requires HEPA filter replacement during this abatement operation, another dioctylpthalate (DOP) test shall be performed. The results of the dioctylpthalate (DOP) test shall be submitted when received and reviewed by the AOC/SOHB before re-using the equipment under this Contract.
- 19. Encapsulant Requirements: Submit, before the start of work, the manufacturer's technical data for all types of encapsulant used on the project. Provide application instructions. Submit certification data as required in Encapsulant section. Submit MSDS for each material in compliance with 29 CFR 1910.1200. Submit certification from manufacturer that material it will adequately wet ACM as per NESHAP requirements.
- D. During-Work Asbestos Abatement Submittal: After review and approval by the Project CIH, submit items required under 1.4D1 and 1.4D2 to the AOC/SOHB as the work progresses and at the times specified.
  - 1. Air Monitoring and Work Area Inspections:
    - a. *Air Monitoring Results:* Post for all workers to see, within 24 hours of collection, the results of all air monitoring conducted. Post the results at a location designated by the General Contractor and notify the AOC/SOHB. A

- copy of the results shall be provided to the AOC/SOHB within the same time frame.
- b. Differential Air Pressure Readings: Starting when a negative pressure containment is erected and approved by the Project CIH, a strip chart recorder shall be installed and work area relative pressure shall be monitored 24 hours a day until final air clearances are produced. Submit a copy of the daily strip chart record to the AOC/SOHB within 24 hours after the recording was made.
- c. Work Area Inspections: The Project CIH shall personally perform a visual inspection of the abatement work area for the pre-removal, pre-final, and re-occupancy stage. The Project CIH or the IH(s) working for the Project CIH, will perform visual inspections of the abatement work area daily and pre-final. Submit documentation of the daily, pre-removal, pre-final inspections to the AOC/SOHB, within 24 hours of completion. Documentation of the re-occupancy stages of the work inspection shall be submitted to the AOC/SOHB as soon as completed.

# 2. Transporting and Disposing of Asbestos Containing Materials (ACM):

- a. Disposal Receipts: Submit receipts from the transporter, that acknowledge the contractor's shipment of ACM from the site (NESHAP Waste Shipment Records) within three (3) days following removal of ACM from the premises. Provide on each receipt the date, quantity of material removed, and signature of an authorized representative of the transporter. A signed and dated copy to the Waste Shipment Record, showing receipt at an authorized landfill, must be received by AOC/SOHB within 10 calendar days of the date of the shipping receipt.
- Transportation Vehicles: Transportation shall be in vehicles dedicated to asbestos transportation. Vehicles shall be marked in accordance with DOT and NESHAP regulations.
- E. **Final Submittal:** After review and approval by the Project CIH, submit items required under 1 and 2 below to the AOC/SOHB within 3 calendar days at the completion of work for each containment. The CIH shall submit a project report consisting of:
  - The daily log book information and documentation of events during the abatement project.
  - Copies of all waste shipment records for asbestos waste sent to the designated landfill.
  - 3. The report shall include a certificate of completion.
  - 4. All air and bulk sampling conducted for this project.
  - 5. All final air clearance data.
  - 6. All perimeter samples.
  - 7. Copies of training certificates for all personnel engaged in this abatement work.
  - 8. Copies of respirator fit tests for all personnel engaged in this abatement work.
  - 9. **Copies** of the OSHA required asbestos and respirator medical clearances for all personnel engaged in this abatement work.

- 10. The final report shall include an executive summary. The executive summary must show:
  - a. A summary of the work done.
  - b. A statement that all personnel conducting this abatement operation had all required training and were medically cleared to perform this type of work in accordance with OSHA, EPA regulations and all State and Local laws, rules and regulations.
  - c. The executive summary must also show that all final air samples results were below the limits established by EPA, the District of Columbia, and this specification and declare the area ready for re-occupancy.
  - d. **Describe** the type, application, and quantity of asbestos containing materials removed by the contractor.
  - e. *Include all copies* of the final air and bulk sampling as performed by a third party.
  - f. *Indicate* that all building systems disturbed by the contractor during the work under the contract have been reinstalled and are in working order.

### 1.5 CONTRACTOR RESPONSIBILITY:

- A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local regulations pertaining to the protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations, and shall hold the government harmless for failure to comply with any applicable safety or health regulation on the part of himself, his employees, or his subcontractors.
- B. The Contractor shall secure all necessary permits in conjunction with asbestos removal, hauling and disposition and provide timely notification of such actions, as may be required by federal, state, regional, and local authorities. For this project, ensure that notification to the Regional Office of the EPA and the District of Columbia is made, and provide copies of the notification to the AOC/SOHB 10 days prior to the commencement of the work. Provide notification in accordance with 40 CFR 61.22(d)(1).
- C. The Contractor shall inform the affected building Superintendent and the AOC/SOHB not less than thirty five (35) days prior to commencement of the asbestos abatement, of the health or safety factors that necessitate the asbestos abatement and procedures that will be taken to protect the health, safety, and possessions of the building occupants.

## D. Site Security:

Regulated area access is to be restricted only to authorized, trained/accredited and
protected personnel. These may include the Abatement Contractor's employees,
employees of Subcontractors, AOC employees and representatives, State and local
inspectors, and any other designated individuals. A list of authorized personnel shall

- be established prior to commencing the project and be posted in the clean room of the decontamination unit.
- 2. **Entry into** the regulated area by unauthorized individuals shall be reported immediately to the Competent Person.
- A log book shall be maintained in the clean room of the decontamination unit.
   Anyone who enters the regulated area must record their name, affiliation, time in, and time out for each entry.
- 4. Access to the regulated area shall be through a single decontamination unit. All other access (doors, windows, hallways, etc.) shall be sealed or locked to prevent entry to or exit from the regulated area. The only exceptions for this requirement are the waste load-out area which shall be sealed except during the removal of containerized asbestos waste from the regulated area, and emergency exits. Emergency exits shall not be locked from the inside, however, they shall be sealed with poly sheeting and taped until needed.
- 5. The Abatement Contractor's Competent Person shall control site security during abatement operations in order to isolate work in progress and protect adjacent personnel. Containment shall be locked out when the competent person leaves the site. The entrance to the regulated area requires all entrants to be logged in/out so that only authorized personnel are allowed entrance.
- 6. The Abatement Contractor will have the AOC's assistance in notifying adjacent personnel of the presence, location, and quantity of ACM in the regulated area and enforcement of restricted access by the AOC's employees.
- 7. **The Abatement Contractor** shall provide plans to secure the regulated area during non-working hours.

# E. Emergency Action Plan and Arrangements:

- 1. An Emergency Action Plan shall be developed by the Abatement Contractor prior to commencing abatement activities and shall be agreed to by the Abatement Contractor and the AOC. The Plan shall meet the requirements of 29 CFR 1910.38 (a);(b).
- 2. Emergency procedures shall be in written form and prominently posted in the clean room and equipment room of the decontamination unit. Everyone, prior to entering the regulated area, must read and sign these procedures to acknowledge understanding of the regulated area layout, location of emergency exits and emergency procedures.
- 3. **Emergency planning** shall include written notification of police, fire, and emergency medical personnel of planned abatement activities; work schedule and layout of regulated area, particularly barriers that may affect response capabilities.
- 4. **Emergency planning** shall include consideration of fire, explosion, hazardous atmospheres, electrical hazards, slips/trips and falls, fiber release episodes, confined spaces, and heat stress illness. Written procedures addressing emergency situations shall be developed. Employees need to be aware of these procedures.
- Employees shall be trained in regulated area/site evacuation procedures in the event of workplace emergencies.
  - a. *For non life-threatening* situations employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance

- from fellow workers, if necessary, before exiting the regulated area to obtain proper medical treatment.
- b. For life-threatening injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker, remove them from the regulated area, and secure proper medical treatment.
- 6. **Telephone numbers** of all emergency response personnel shall be prominently posted in the clean room, along with the location of the nearest telephone.
- 7. The Emergency Action Plan shall provide for a contingency plan in the event that an incident occurs that may require the modification of the standard operating procedures during abatement. Such incidents include, but are not limited to, fire; accident; power failure; negative pressure failure; and supplied air system failure. The Abatement Contractor shall detail procedures to be followed in the event of an incident assuring that work is stopped and wetting is continued until correction of the problem.

# 1.6 PROJECT/SITE CONDITIONS:

- A. Means of Egress: Establish and maintain emergency and fire exits from the work area.
- B. **Environmental Conditions to be Maintained:** Normal environmental conditions (heat, light, air conditioning) must be maintained outside of the work area.
- C. Decontamination Facilities: Provide each work area with separate personnel decontamination facility (PDF) and equipment decontamination facilities (EDF). Ensure that the PDF is the only means of ingress and egress to the regulated area and that all equipment, bagged waste, and other material exit the regulated area only through the EDF. See OSHA 29 CFR 1926.1101, Appendix F. The size and location of this facility shall be reviewed by the AOC/SOHB.
  - 1. General Requirements: All personnel entering or exiting a regulated area shall follow the requirements of 29 CFR 1926.1101 (j)(1) and these specifications. All equipment and materials must exit the regulated area through the EDF and be decontaminated in accordance with these specifications. Walls and ceilings of the PDF and EDF must be constructed of a minimum of 2 layers of 6 mil, clear/opaque/black/ white fire retardant polyethylene sheeting and be securely attached to existing building components and/or an adequate temporary framework. A minimum of 2 layers of 6 mil poly shall also be used to cover the floor under the EDF and PDF units. Construct doors so that they overlap and secure to adjacent surfaces. Weigh sheets with layers of duct tape so that they close quickly after release. Put arrows on sheets so they show direction of travel and overlap. Construct a solid barrier on the occupied side(s) to protect the sheeting if the area adjacent to the abatement is occupied.
  - 2. Temporary Facilities to the PDF and EDF: The Competent Person shall provide temporary water service connections to the EDF and PDF. Water supply must be of adequate pressure and meet requirements of 29 CFR 1910.141(d)(3). Provide adequate temporary electric power with ground fault protection and overhead wiring in the EDF and PDF. Provide a sub-panel for all temporary power in the clean room. Provide

- adequate lighting to maintain a minimum of 50 foot candles in the EDF and PDF. Provide temporary heat to maintain 70 deg F throughout the PDF and EDF except the shower of the PDF shall be maintained at 75 deg F.
- Personnel Decontamination Facility (PDF): The Competent Person shall provide a PDF consisting of shower room which is contiguous to a clean room and equipment room. The PDF must be sized to accommodate the number of personnel scheduled for the project. The shower room, located in the center of the PDF, shall be fitted with as many portable showers as necessary to insure all employees can complete the entire decontamination procedure within 15 minutes. The PDF shall be constructed of opaque poly for privacy. The PDF shall be constructed to eliminate any parallel routes of egress without showering.
- Clean Room: The clean room must be visually separated from the rest of the building 4. to protect the privacy of personnel changing clothes. The clean room shall be constructed of at least 2 layers of 6 mil fire retardant poly to provide an air tight room. Provide a minimum of 2 flapped doorways 3 feet wide. One doorway shall be the entry from outside the PDF and the second doorway shall be to the shower room of the PDF. The floor of the clean room shall be maintained in a clean, dry condition. Shower overflow shall not be allowed into the clean room. All surfaces in the clean room shall be disinfected twice after each shift change. An adequate supply of disposable towels and disposable protective clothing shall be present in the clean room. Provide up to 2 storage lockers per person. A portable fire extinguisher, Type ABC, shall be provided in accordance with OSHA and NFPA Standard 10. All persons entering the regulated area shall remove all street clothing in the clean room and dress in disposable protective clothing and respiratory protection. Any person entering the clean room does so either from the outside with street clothing on or is coming from the shower room without clothing or with bathing suits and thoroughly washed. Ensure that females, who are required to enter the regulated area be ensured of their privacy throughout the entry/exit process by posting guards at both entry points to the PDF so no male can enter or exit the PDF during her stay in the PDF.
- Shower Room: The Competent Person shall assure that the shower room is a 5. completely water tight compartment to be used for the movement of all personnel from the clean room to the equipment room and for the showering of all personnel going from the regulated area to the clean room. Each shower shall be constructed so water runs down the walls of the shower and into a drip pan. Install a freely draining smooth floor on top of the shower pan. The shower room shall be separated from the rest of the building and from the clean room and equipment room using air tight walls made from at least 2 layers of 6 mil fire retardant poly. The shower shall be equipped with a shower head and controls, hot and cold water, drainage, soap dish and continuous supply of soap, and shall be maintained in a sanitary condition throughout its use. The controls shall be arranged so an individual can shower without assistance. Provide a flexible hose shower head. Waste water will be pumped to a drain after being filtered through a minimum of a 100 micron sock in the shower drain; a 20 micron filter; and a final 5 micron filter. Filters will be changed a minimum of daily or more often as needed. Filter changes must be done in the shower to prevent loss of contaminated water. Hose down all shower surfaces after each shift and clean any debris from the shower pan. Residue is to be disposed of as asbestos waste.

- 6. **Equipment Room**: The Competent Person shall provide an equipment room which shall be an air tight compartment for the storage of work equipment, reusable footwear and for use as a change station for personnel exiting the regulated area. The equipment room shall be separated from the regulated area by a minimum 3 foot wide door made of three layers of 6 mil fire retardant poly. The equipment room shall be separated from the regulated area, the shower room and the rest of the building by air tight walls and ceiling constructed of a minimum of 2 layers of 6 mil fire retardant poly. If the airborne level of asbestos in the regulated area is expected to exceed 0.5 f/cc, add an additional air-lock between the equipment room and the regulated area. Damp wipe all surfaces of the equipment room after each shift change. Provide an additional loose layer of 6 mil fire retardant poly per shift change and remove this layer after each shift. Provide a temporary electrical sub-panel in this room to accommodate any power tools and equipment used in the regulated area.
- 7. **PDF construction shall be:** Clean room at the entrance followed by a shower room followed by an equipment room leading to the regulated area. Each doorway in the PDF is minimum of double flaps of 6 mil fire retardant poly.
- 8. **Equipment Decontamination Facility (EDF)**: The Competent Person shall provide an EDF consisting of a wash room, and clean room for removal of equipment and material from the regulated area. Personnel shall not enter or exit the EDF except in the event of an emergency. Clean debris and residue in the EDF daily. All surfaces in the EDF shall be wiped/hosed down after each shift and all debris shall be cleaned from the shower pan. The EDF shall consist of the following:
  - a. **Wash Down Station:** Provide an enclosed shower unit in the regulated area just outside the Wash Room as an equipment bag and container cleaning station.
  - b. Wash Room: Provide a wash room for cleaning of bagged or containerized asbestos containing waste materials passed from the regulated area. Construct the wash room using materials selected and furnished by the Abatement Contractor and 2 layers of 6 mil fire retardant poly. Locate the wash room so that packaged materials, after being wiped clean, can be passed to the Holding Room. Doorways in the wash room shall be constructed of two layers of 6 mil fire retardant poly.
  - c. **Holding Room**: Provide a holding room as a drop location for bagged materials passed from the wash room. Construct the holding room using materials selected and furnished by the Abatement Contractor and 2 layers of 6 mil fire retardant poly. The holding room shall be located so that bagged material cannot be passed from the wash room to the clean room unless it goes through the holding room. Doorways in the holding room shall be constructed of two layers of 6 mil fire retardant poly.
  - d. Clean Room: Provide a clean room to isolate the holding room from the building. Construct the clean room using materials selected and furnished by the Abatement Contractor and 2 layers of 6 mil fire retardant poly. The clean room shall be located so as to provide access to the holding room from the building. Doorways to the clean room shall be constructed of two layers of 6 mil fire retardant poly. When a negative pressure differential system is used, a rigid

- enclosure separation between the EDF clean room and the adjacent areas shall be provided.
- e. **EDF construction shall be:** Wash Room leading to a Holding Room followed by a Clean Room leading to the building.
- 9. Equipment Decontamination Procedures: At wash down station in the regulated area, thoroughly wet clean contaminated equipment and/or sealed polyethylene bags and pass into Wash Room after visual inspection. When passing anything into the Wash Room, close all doorways of the EDF, other than the doorway between the wash down station and the Wash Room. Keep all outside personnel clear of the EDF. Once inside the Wash Room, wet clean the equipment and/or bags. Close all doorways except the doorway between the Holding Room and the Clean Room. Workers from the Clean Room/Exterior shall enter the Holding Room and remove the decontaminated/cleaned equipment/bags for removal and disposal. These personnel shall wear full protective clothing and appropriate respirators. At no time shall personnel from the clean side be allowed to enter the Wash Room.
- D. Access to Work Area: Only approved personnel are authorized access to the work area. Once asbestos removal has started, access to the abatement work area by non-approved personnel is not permitted unless authorized by the AOC/SOHB representative, the Project CIH or the competent person. Access to work areas shall always be through decontamination areas. No employee shall be allowed to wear a respirator unless a physician has determined they are capable of doing so and has issued a written opinion for that person. All personnel wearing respirators shall have a current qualitative/quantitative fit test which was conducted in accordance with 29 CFR 1910.134 (f) and Appendix A. Fit tests shall be done for PAPRs with the blower off. The Competent Person shall assure that the positive/negative fit check is done each time the respirator is donned by an employee. Head coverings must cover respirator head straps. Any situation that prevents an effective face piece to face seal as evidenced by failure of a fit check shall preclude that person from wearing a respirator until resolution of the problem. The Project CIH shall review work area air samples and make adjustments for the type of respiratory protection required. All personnel in the regulated area shall not be allowed to eat, drink, smoke, chew tobacco or gum, apply cosmetics, or in any way interfere with the fit of their respirator. The following personnel shall have access to work area with the established respiratory protection:
  - The AOC/SOHB will provide a list of AOC employees, who are authorized access to the abatement area.
  - 2. OSHA Inspectors.
  - EPA Inspectors.
  - DC Inspectors.
  - Approved Contractor personnel.
- E. Protective Clothing: Provide boots, booties, hard hats, goggles, clothing, respirators and any other personal protective equipment as determined by conducting the hazard assessment required by OSHA in 29 CFR 1910.132 (d). Provide all personnel entering the regulated area with disposable full body coveralls, disposable head covering, and 18 inch boot coverings. The Competent Person shall ensure the integrity of personal protective equipment worn for

the duration of the project. Provide plastic/rubber disposable gloves for hand protection. Cloth type gloves may be worn under plastic/rubber gloves, but cannot be used alone. Duct tape shall be used to secure all suit sleeves to wrists and to secure foot coverings at the ankle. The contractor shall provide daily, five sets of protective clothing for use by visiting authorized personnel.

- F. Regulated Area Entry Procedure: Worker protection shall meet the most stringent requirement. The Competent Person shall ensure that each time workers enter the regulated area, they remove ALL street clothes in the clean room of the decontamination unit and put on new disposable coveralls, head coverings, a clean respirator, and then proceed through the shower room to the equipment room where they put on non-disposable required personal protective equipment.
- G. **Decontamination Procedure PAPR:** The Competent Person shall require all personnel to adhere to following decontamination procedures whenever they leave the regulated area.
  - When exiting the regulated area, remove disposable coveralls, and ALL other clothes, disposable head coverings, and foot coverings or boots in the equipment room.
  - 2. Proceed to the shower with respirator but without clothing or with bathing suit. Showering is MANDATORY. Care must be taken to follow reasonable procedures in removing the respirator to avoid damaging filters while showering. The following procedure is required as a minimum:
    - a. **Thoroughly wet** body including hair and face. If using a PAPR, hold blower and battery above head to keep filters dry.
    - b. **With respirator** still in place, thoroughly decontaminate body, hair, respirator face piece, and all other parts of the respirator except the blower and battery pack on a PAPR. Pay particular attention to cleaning the seal between the face and respirator face piece and under the respirator straps.
    - c. Take a deep breath, hold it and/or exhale slowly, completely wetting hair, face, and respirator. While still holding breath, remove the respirator and hold it away from the face before starting to breathe.
  - 3. Carefully decontaminate the face piece of the respirator inside and out. If using a PAPR, shut down using the following sequence: a) first cap inlets to filters; b) turn blower off to keep debris collected on the inlet side of the filter from dislodging and contaminating the outside of the unit; c) thoroughly decontaminate blower and hoses; d) decontaminate battery pack with a damp rag. (Note: THIS PROCEDURE IS NOT A SUBSTITUTE FOR RESPIRATOR CLEANING!).
  - 4. Shower and wash body completely with soap and water. Rinse thoroughly.
  - 5. Rinse shower room walls and floor to drain prior to exiting.
  - Proceed from shower to clean room; dry off and change into street clothes or into new disposable work clothing.
- H. Decontamination Procedure Air Purifying, Negative Pressure Respirator: The Competent Person shall require all personnel use the following decontamination procedures,

as a minimum, whenever leaving the regulated area with a full face, HEPA filtered respirator:

- When exiting the regulated area, remove disposable coveralls and ALL other clothes, disposable head coverings, and disposable foot coverings or boots in the equipment room.
- 2. Still wearing the respirator and completely naked, proceed to the shower, which is mandatory. Care must be taken to follow reasonable procedures in removing the respirator and filters to avoid asbestos fibers while showering. The following procedure is required, as a minimum:
  - a. Thoroughly wet body from neck down. Wet hair as thoroughly as possible without wetting the respirator filter.
  - b. **Take a deep** breath, hold it and/or exhale slowly, complete wetting of hair, thoroughly wetting face, respirator and filter(s). While still holding breath, remove respirator and hold it away from face before starting to breathe.
- 3. **Dispose of** wetted filters from respirator.
- 4. Carefully decontaminate respirator face piece and respirator inside and out. (NOTE: THIS IS NOT A SUBSTITUTE FOR RESPIRATOR CLEANING!).
- 5. Shower and wash body completely with soap and water. Rinse thoroughly.
- 6. Rinse shower room walls and floor to drain prior to exiting.
- Proceed from shower room to clean room and change into street clothes or into new disposable work clothes.

## **PART 2 - PRODUCTS**

## 2.1 MATERIALS AND EQUIPMENT:

- A. General Requirements (All Abatements Projects): All equipment, including protective clothing and respirators, used in the execution of this contract and provided to visitors to the site, shall be approved by the Project CIH and shall comply with ASTM E 849 and with the applicable Federal, State, and local regulations. Respirators shall conform to the OSHA requirements in 29 CFR 1910.134 and 29 CFR 1926.1101, except that single use and disposable respirators shall not be used. Type of respirators required shall be as specified by the Project CIH. If any air sampling indicates levels above 0.1 fibers per cubic centimeter or "too dirty to count", powered air or supplied air (type C) respirators shall be required during actual removal operations. Prior to the start of work, the abatement contractor shall provide and maintain a sufficient quantity of materials and equipment to assure continuous and efficient work throughout the duration of the project. Work shall not start unless the following items have been delivered to the site and the CIH has submitted verification to the AOC's representative to this effect.
  - 1. **All materials** shall be delivered in their original package, container or bundle bearing the name of the manufacturer and the brand name (where applicable).

- Store all materials subject to damage off the ground, away from wet or damp surfaces
  and under cover sufficient enough to prevent damage or contamination. Flammable
  materials cannot be stored inside buildings. Replacement materials shall be stored
  outside of the regulated/work area until abatement is completed.
- The Abatement Contractor shall not block or hinder use of buildings by staff and
  visitors to the AOC in partially occupied buildings by placing materials/equipment in
  any unauthorized place.
- 4. **The Competent Person** shall inspect for damaged, deteriorating or previously used materials. Such materials shall not be used and shall be removed from the work site and disposed of properly.
- 5. Polyethylene sheeting for walls in the regulated area shall be a minimum of 6-mil thick. For floors and all other uses, sheeting of at least 6-mil thickness shall be used in widths selected to minimize the frequency of joints. Fire retardant poly shall be used throughout.
- 6. The method of attaching polyethylene sheeting shall be agreed upon in advance by the Contractor and the AOC and selected to minimize damage to equipment and surfaces. Method of attachment may include any combination of moisture resistant duct tape or other waterproof tape, furring strips, spray glue, staples, nails, screws, lumber and plywood for enclosures or other effective procedures capable of sealing polyethylene to dissimilar finished or unfinished surfaces under both wet and dry conditions (including the use of amended water).
- 7. **Polyethylene sheeting** utilized for personnel decontamination facility shall be opaque white or black in color, 6 mil fire retardant poly.
- 8. **Installation and plumbing hardware**, showers, hoses, drain pans, sump pumps and waste water filtration system shall be provided.
- 9. An adequate number of negative pressure units capable of providing a minimum of 4 air changes per hour in the regulated area while maintaining minus 0.02 inch water column shall be used. Two (2) additional negative pressure units shall be available to replace any malfunctioning unit.
- 10. An adequate number of HEPA vacuums, air sampling pumps and loaded filter cassettes, supplied air system, if used, providing Grade D breathing air with respirators and air lines sufficient for personnel, pressure differential gauge and recording capability shall be provided.
- 11. An adequate number of scrapers, sprayers, nylon brushes, brooms, disposable mops, rags, sponges, staple guns, shovels, ladders and scaffolding of suitable height and length as well as meeting OSHA requirements, fall protection devices, water hose to reach all areas in the regulated area, airless spray equipment, and any other tools, materials or equipment required to conduct the abatement project. All electrically operated hand tools, equipment, electric cords shall be equipped with ground-fault circuit protection.
- Special protection for objects in the regulated area shall be detailed (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).
- 13. **6 mil disposal** bags for asbestos waste shall be pre-printed with labels and markings as required by OSHA, EPA.

- 14. **Impermeable asbestos** disposal drums shall be metal or fiberboard with locking ring tops with required OSHA, EPA and DOT labels and markings.
- 15. The AOC shall be provided a copy of the MSDS as required for all hazardous chemicals including encapsulants under OSHA 29 CFR 1910.1200 Hazard Communication. Methylene chloride shall not be used with any spray adhesive or other product.
- 16. **DANGER signs**, as many and as required by OSHA 29 CFR 1926.1101(k)(7), shall be provided and placed by the Competent Person. All other posters and notices required by Federal and State regulations shall be posted in the Clean Room.
- 17. Adequate respirators, disposable protective clothing, hard hats, goggles, gloves and footwear for the project and number of personnel/shifts shall be provided. All personal protective equipment issued must be based on a hazard assessment conducted under 29 CFR 1910.132(d).
- B. Negative Pressure Filtration System: The Abatement Contractor shall provide enough HEPA negative air machines to completely exchange the regulated area air volume 4 actual times per hour. The Competent Person shall determine the number of units needed for each regulated area by dividing the cubic feet in the regulated area by 15 and then dividing that result by the actual cubic feet per minute (cfm) for each unit to determine the number of units needed to effect 4 air changes per hour and maintain -.02 inches of negative pressure. Provide a standby units in the event of machine failure and/or emergency in an adjacent area.

# C. Negative Air Machines (HEPA Units):

- 1. Negative Air Machine Cabinet: The cabinet shall be constructed of steel or other durable material capable of withstanding potential damage from rough handling and transportation. The width of the cabinet shall be less than 30 inches in order to fit in standard doorways. The cabinet must be factory sealed to prevent asbestos fibers from being released during use, transport, or maintenance. Any access to and replacement of filters shall be from the inlet end. The unit must be on casters or wheels.
- 2. **Negative Air Machine Fan:** The fan rating must provide the air-moving capacity under actual operating conditions. Manufacturer's typically use "free-air" (no resistance) conditions when rating fans. The fan must be a centrifugal type fan.
- 3. Negative Air Machine Final Filter: The final filter shall be a HEPA filter. The filter media must be completely sealed on all edges within a structurally rigid frame. The filter shall align with a continuous flexible gasket material in the negative air machine housing to form an air tight seal. Each HEPA filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 mm dioctylphthalate (DOP) particles. Testing shall have been done in accordance with Military Standard MIL-STD-282 and Army Instruction Manual 136-300-175A. Each filter must bear a UL586 label to indicate ability to perform under specified conditions. Each filter shall be marked with the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.
- 4. **Negative Air Machine Pre-filters:** The pre-filters, which protect the final HEPA filter by removing larger particles, are required to prolong the operating life of the HEPA

- filter. Two stages of pre-filtration are required. A first stage pre-filter shall be a low efficiency type for particles 10 microns or larger. A second stage pre-filter shall have a medium efficiency effective for particles down to 5 microns or larger. Pre-filters shall be installed either on or in the intake grid of the unit and held in place with a special housing or clamps.
- Negative Air Machine Instrumentation: Each unit must be equipped with a gauge to measure the pressure drop across the filters and to indicate when filters have become loaded and need to be changed. A table indicating the cfm for various pressure readings on the gauge shall be affixed near the gauge for reference or the reading shall indicate at what point the filters shall be changed, noting cfm delivery at that point. The unit must have an elapsed time meter to show total hours of operation.
- 6. Negative Air Machine Safety and Warning Devices: An electrical/ mechanical lockout must be provide to prevent the fan from being operated without a HEPA filter. Units must be equipped with an automatic shutdown device to stop the fan in the event of a rupture in the HEPA filter or blockage in the discharge of the fan. Warning lights are required to indicate normal operation; too high a pressure drop across filters; or too low of a pressure drop across filters.
- 7. **Negative Air Machine Electrical:** All electrical components shall be approved by the National Electrical Manufacturer's Association (NEMA) and Underwriter's Laboratories (UL). Each unit must be provided with overload protection and the motor, fan, fan housing, and cabinet must be grounded.

#### D. HEPA Vacuums

- All HEPA vacuums: All electrical components shall be approved by the National Electrical Manufacturer's Association (NEMA) and Underwriter's Laboratories (UL). Each unit must be provided with overload protection and the motor and housing must be grounded.
- B. Testing of the HEPA Filtered vacuum HEPA filter: The vacuum filter shall be a HEPA filter. The filter media must be completely sealed on all edges within a structurally rigid frame. The filter shall align with a continuous flexible gasket material in the HEPA vacuum housing to form an air tight seal. Each HEPA filtered vacuum shall be individually tested and certified to have an efficiency of not less than 99.97 percent when challenged with 0.3 mm dioctylphthalate (DOP) particles. Testing shall have been done in accordance with Military Standard MIL-STD-282 and Army Instruction Manual 136-300-175A. Each filter must bear a UL586 label to indicate ability to perform under specified conditions. Each filter shall be marked with the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.

## 2.2 ENCAPSULATING MATERIALS:

A. **Types of Encapsulant:** The following four types of encapsulant must comply with performance requirements as stated in "Performance Requirements":

- 1. Removal encapsulant used as a wetting agent to remove ACM.
- Bridging encapsulant provides a tough, durable coating on ACM.
- 3. Penetrating encapsulant penetrates/encapsulates ACM at least 13 mm (½").
- 4. Lock down encapsulant seals microscopic fibers on surfaces after ACM removal.
- B. **Performance Requirements:** Encapsulant shall meet the latest requirements of EPA; shall not contain toxic or hazardous substances; or solvents; and shall comply with the following performance requirements:
  - 1. General Requirements for all encapsulants:
    - a. ASTM E84: Flame spread of 25; smoke emission of 50.
    - b. University of Pittsburgh Protocol: Combustion Toxicity; zero mortality.
    - c. ASTM C732: Accelerated Aging Test; Life Expectancy 20 years.
    - d. ASTM E96 Permeability: Minimum of 0.4 perms.
  - 2. Bridging/Penetrating Encapsulant:
    - a. ASTM E736 Cohesion/Adhesion Test: 24 kPa (50 lbs/ft2).
    - b. **ASTM E119 Fire Resistance:** 3 hours (Classified by UL for use on fibrous or cementitious fireproofing).
    - c. ASTM D2794 Gardner Impact Test; Impact Resistance: Minimum 11.5 kg-mm (43 in/lb).
    - d. ASTM D522 Mandrel Bend Test; Flexibility: No rupture or cracking.
  - 3. Lock down Encapsulant:
    - a. **ASTM E119 Fire resistance:** 3 hours (tested with fireproofing over encapsulant applied directly to steel member).
    - b. **ASTM E736 Bond Strength:** 48 kPa (100 lbs/sq. ft.) (test compatibility with cementitious and fibrous fireproofing).
    - c. *In certain situations*, encapsulant may have to be applied to hot pipes or equipment. The encapsulant shall be able to withstand high temperatures without cracking or off-gassing any noxious vapors during application.
  - 4. The Project CIH shall review and recommend approval for all encapsulating materials used under this contract, prior to submitting them to Architect for review, and prior to their use on site. Encapsulating materials (sealants) shall meet the latest requirements of the Environmental Protection Agency (EPA) and shall possess the characteristics outlined in paragraphs "Types of Encapsulant" and "Performance Requirements" above and the following:
    - a. Adherence: The sealant eliminates fiber dispersal by adhering to the fibrous substrate with sufficient penetration to prevent separation of the sealant from the sprayed asbestos material.

- b. Impact Penetration: It withstands impact and penetration, protects the enclosed sprayed asbestos material, and it must not cause separation of sprayed asbestos material from its original substrate.
- c. *Flexibility:* It possesses enough flexibility to accommodate atmospheric changes and settling of the structure over time.
- d. **Resistance to Smoke and Flame:** It shall have high flame retardant characteristics and a low toxic fume and smoke emission rating.
- e. *Ease of Application:* It must be easily applied with relative insensitivity to errors in preparation or application. Ease of repair by routine maintenance personnel is desirable.
- f. *Toxicity:* The sealant must be neither noxious nor toxic to application workers and structure users thereafter.
- g. **Permeability:** It should have some permeability to water vapor to prevent condensation accumulation be resistant to common cleaning agents.
- h. Stability: It shall have suitable stability to weathering and aging.
- C Guarantee. Guarantee encapsulating materials in accordance with Guarantee clause of the General Conditions.

## **PART 3 - EXECUTION**

#### 3.1 PREPARATION:

- A. Isolate the Work Area: Place all tools, scaffolding, materials and equipment needed for working in the regulated area prior to erecting any plastic sheeting. Remove all uncontaminated removable furniture, equipment, and supplies from the regulated area before commencing work, or completely cover with two layers of 6-mil fire retardant poly sheeting and secure with duct tape. Lock out and tag out any HVAC systems in the regulated area. Seal off the perimeter to the regulated area to completely isolate the regulated area from adjacent spaces. All surfaces in the regulated area must be covered to prevent contamination and to facilitate clean-up. Should adjacent areas become contaminated, immediately stop work and clean up the contamination at no additional cost to the Government. Provide firestopping and identify all fire barrier penetrations.
- B. Critical Barriers: Completely separate the regulated area from adjacent areas using fire retardant poly at least 6 mils thick and duct tape. Individually seal with two layers of 6 mil poly and duct tape all HVAC openings into the regulated area. Individually seal all lighting fixtures, clocks, doors, windows, convectors, speakers, or any other objects or openings in the regulated area. Use care with hot/warm surfaces.
- C. Primary Barriers: Clean all furniture, equipment, etc., with HEPA vacuum and wet cleaning prior to being moved or covered. Clean all surfaces in the regulated area with the HEPA vacuum and wet wiping before installing poly sheeting. Cover the regulated area with two layers of 6 mil fire retardant poly on the floors and two layers of 6 mil fire retardant poly on the walls, unless otherwise directed in writing by the AOC's representative. Floor layers

must form a right angle with the wall and turn up the wall at least 300 mm (12 inches). Seams must overlap at least 1800 mm (6 feet) and must be spray glued and taped. Install sheeting so that layers can be removed independently from each other. Mechanically support and seal with duct tape and glue all wall layers.

- 1. **Stairs and Ramps:** If stairs and ramps are covered with 6 mil plastic, two layers must be used. Provide 19 mm (3/4") exterior grade plywood treads held in place with duct tape/glue on the plastic. Do not cover rungs or rails with any isolation materials.
- 2. Carpeted Floors: Carpeting shall be covered with three layers of 6 mil poly. Corrugated cardboard sheets or a ridge material approved by the AOC must be placed between the top and middle layers of the poly.
- 3. **Elevators:** Any elevator walls, floor, and ceiling must be covered with 2 layers of 6 mil fire retardant poly. The elevator door must be in a positively pressurized area outside the clean room of the Decontamination unit. At completion of the abatement work, the elevator must be cleaned as per this section.
- D. **Secondary Barriers:** A loose layer of 6 mil poly shall be used as a drop cloth to protect the primary layers from debris generated during the abatement. This layer shall be replaced at the end of each work shift or as needed during the work.
- E. Extension of the Regulated Area: If the enclosure of the regulated area is breached in any way that could allow contamination to occur, the affected area shall be included in the regulated area and constructed as per this section. If the affected area cannot be added to the regulated area, decontamination measures must be started immediately and continue until air monitoring indicates levels outlined in "Asbestos Control Area" for outside the work area, above, are met.
- F. **Firestop Requirements:** Through penetrations caused by cables, cable trays, pipes, sleeves must be firestopped with a fire-rated firestop system providing an air tight seal. Firestop materials that are not equal to the wall or ceiling penetrated shall be brought to the attention of the AOC Fire Protection Division. The contractor shall list all areas of penetration, the type of sealant used, and whether or not the location is fire rated. Any discovery of penetrations during abatement process shall immediately be brought to the attention of the AOC Fire Protection Division. All walls, floors and ceilings are considered fire rated unless otherwise determined by the AOC Fire Protection Division. Any visible openings whether or not caused by a penetration shall be reported by the contractor to the AOC Fire Protection Division for a sealant system determination. For firestops, contact the AOC Fire Protection Division for the opening size, penetration, and fire rating requirements.
- G. **Pressure Differential:** The fully operational negative air system within the regulated area shall continuously maintain a pressure differential of minus 0.02 inch water column. Before any disturbance of any asbestos material, this shall be demonstrated to the AOC by use of a pressure differential meter/manometer as required by OSHA 29 CFR 1926.1101(e)(5)(i). The Competent Person shall be responsible for providing and maintaining the negative pressure and air changes as required by OSHA and this specification. In any AOC-occupied building or facility, the abatement contractor is responsible for providing twenty four (24)

hour, seven (7) days a week observation of the negative pressure air system once asbestos removal starts. This observation shall continue until final air clearance criteria are met. The suspension of this requirement can only be approved by the AOC/SOHB. Instructions to be followed during the observations will be outlined during the CIH pre-abatement coordination meeting specified in Part 1 above.

- H. Monitoring: The pressure differential shall be continuously monitored and recorded between the regulated area and the area outside the regulated area with a monitoring device that incorporates a strip chart recorder. The strip chart recorder shall become part of the project log and shall indicate at least minus 0.02 inch water column for the duration of the project.
- I. Supplemental Make-up Air Inlets: Provide, as needed for proper air flow in the regulated area, in a location approved by the Project CIH, by making openings in the plastic sheeting to allow outside air to flow into the regulated area. Auxiliary makeup air inlets must be located as far from the negative air machines as possible, off the floor near the ceiling, and away from the barriers that separate the regulated area from the occupied clean areas. Cover the inlets with weighted flaps which will seal in the event of failure of the negative pressure system. The flap must be sprayed with adhesive to assure sealing if it closes.
- J. Testing the System: The negative pressure system must be tested before any ACM is disturbed in any way. After the regulated area has been completely prepared, the decontamination units set up, and the negative air machines installed, start the units up one at a time. Demonstrate the operation and testing of the negative pressure system to the AOC/SOHB using smoke tubes and a negative pressure gauge to document the negative pressure and air flow. Testing must also be done at the start of each work shift.
- K. Demonstration of the Negative Air Pressure System: The demonstration of the operation of the negative pressure system to the AOC/SOHB shall include, but not be limited to, the following:
  - 1. Plastic barriers and sheeting move lightly in toward the regulated area.
  - 2. Curtains of the decontamination units move in toward regulated area.
  - 3. **There is a** noticeable movement of air through the decontamination units. Use the smoke tube to demonstrate air movement from the clean room to the shower room to the equipment to the regulated area.
  - 4. Use smoke tubes to demonstrate air is moving air across all areas in which work is to be done. Use a differential pressure gauge to indicate a negative pressure of at least minus 0.02 inch across every barrier separating the regulated area from the rest of the building. Modify the system as necessary to meet the above requirements.
- L. Use of the Negative Pressure System During Abatement Operations:
  - 1. **Start units before** beginning any disturbance of ACM occurs. After work begins, the units shall run continuously, maintaining a minimum of 4 actual air changes per hour at

- a negative pressure differential of minus 0.02 inch water column, for the duration of the work until a final visual clearance and final air clearance has been completed.
- 2. The negative air machines shall not be shut down at any time during the duration of the project unless it has been authorized by the AOC/SOHB.
- 3. Abatement work shall begin at a location farthest from the units and proceed toward them. If an electric failure occurs, the Competent Person shall stop all abatement work and immediately begin wetting all exposed asbestos materials for the duration of the power outage. Abatement work shall not resume until power is restored and all necessary units are operating properly again.
- 4. **The negative air** machines shall continue to run after all work is completed and until a final visual clearance and a final air clearance has been completed for that regulated area.
- M. **Dismantling the System:** After completion of the final visual and final air clearance has been obtained, the units may be shut down. The units shall have been completely decontaminated, all pre-filters removed and disposed of as asbestos waste, and the unit inlet and outlet sealed with 2 layers of 6 mil poly.
- N. **Before the work is begun**, clean all removable items and equipment. Remove them from the work area and store as directed.
- O. Cover all non-removable items and equipment in the work area with six (6) mil flame retardant plastic sheeting taped securely in place.
- P. When specified, remove all heating, ventilation, and air conditioning system filters, pack them in sealable double approved disposal bags or containers for disposal in the approved waste disposal site and replace them with new filters upon completion of abatement. Openings created by the removal of HVAC filters shall be sealed using 6 mil plastic sheeting taped securely in place, prior to start of work.
- Q. Post warning signs: on the primary containment as required by 29 CFR 1910.1001, 29 CFR 1926.1101, ASTM E 849, as directed by District of Columbia Title 20 DCMR, Section 800 "Control of Asbestos" and as directed by the Architect.
- R. Obtain Approval of the Finished Primary Containment from the Project CIH, prior to starting any actual asbestos removal work.

#### 3.2 WORK PROCEDURE:

A. General Procedures: The enclosed work areas shall be defined as an asbestos regulated area and all asbestos worker protection and work practices not addressed in this specification shall be performed in conformance with the general safety and health provisions of 29 CFR 1910.1001, 29 CFR 1910.20, and the construction industry standard for asbestos, 29 CFR 1926.1101, respectively. The Project CIH shall review work area air samples and make adjustments for the type of respiratory protection required. For asbestos abatement work, use general work practices, work practices for removal, and work practices for encapsulation as

- specified in 29 CFR 1926.1101. If a conflict arises, the more stringent application shall apply until a determination is made by the Architect.
- B. **Protective Clothing:** Provide boots, booties, hard hats, goggles, clothing, respirators and any other personal protective equipment as determined by conducting the hazard assessment required by OSHA at 29 CFR 1910.132 (d). Provide all personnel entering the regulated area with disposable full body coveralls, disposable head covering, and 18 inch boot coverings. The Competent Person shall ensure the integrity of personal protective equipment worn for the duration of the project. Provide plastic/rubber disposable gloves for hand protection. Cloth type gloves may be worn under plastic/rubber gloves, but cannot be used alone. Duct tape shall be used to secure all suit sleeves to wrists and to secure foot coverings at the ankle.
- C. Local Exhaust System: Provide a local HEPA filtered exhaust system in the asbestos control area. The local HEPA filtered exhaust system shall exhaust to the outside of the building. Local HEPA filtered exhaust equipment must be sufficient to maintain a negative air pressure of 0.02 inch of water anywhere in the asbestos control area. In no case shall the building ventilation system be used as the local exhaust system for asbestos control. Filtering in vacuums and exhaust equipment shall be HEPA filtered equipped and conform to ANSI Z9.2; HEPA filters shall be used in all vacuums and exhaust equipment. NOTE: Approval from the AOC/SOHB is required for all local HEPA filtered exhaust systems that cannot be exhausted directly outside the building. To exhaust an HEPA filtered local exhaust system from an asbestos control area to the inside an AOC building will require the approval of the AOC/SOHB. The HEPA filtered exhaust equipment shall also pass a Dioctylphthalate (DOP) test for HEPA filtered equipment each time a containment that is to be exhausted into the building is erected.
- D. Controlling Access to the Regulated Area: Access to the regulated area is allowed only through the personnel decontamination facility (PDF). All other means of access shall be eliminated and OSHA Danger asbestos signs posted as required by OSHA. If the regulated area is adjacent to or within view of an occupied area, provide a visual barrier of opaque fire retardant poly sheeting at least 6 mils thick to prevent building occupant observation. If the adjacent area is accessible to the public, the barrier must be solid and capable of withstanding the negative pressure.
- E. Coordination of Work of all Trades: Coordinate the work of all trades to assure that their work is performed in accordance with the applicable regulations and that the asbestos control limits are maintained at all times both inside and outside the asbestos work area.

## 3.3 WET REMOVAL OF ACM OTHER THAN AMOSITE ASBESTOS

A. Adequately and thoroughly wet the ACM to be removed prior to removal to reduce/prevent fiber release to the air. Adequate time must be allowed for the amended water to saturate the ACM. Abatement personnel must not disturb dry ACM. Use a fine spray of amended water or removal encapsulant. Saturate the material sufficiently to wet to the substrate without causing excessive dripping. The material must be sprayed repeatedly/continuously during the removal process in order to maintain adequately wet conditions. Removal encapsulant must be applied in accordance with the manufacturer's written instructions. Perforate or

carefully separate, using wet methods, any outer covering that is painted or jacketed in order to allow penetration and wetting of the material. Where necessary, carefully remove covering while wetting to minimize fiber release. (Note: In no event shall dry removal occur except when a permit is granted for unavoidable safety hazards.)

- B. If ACM does not wet well with amended water due to coating or jacketing, remove as follows:
  - Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels.
  - 2. **Remove saturated** ACM in small sections. Do not allow material to dry out. As material is removed, place the material, while still wet, into 6-mil poly asbestos waste bags. Twist tightly the bag neck, bend over (gooseneck) and seal with a minimum of three tight wraps of duct tape. Clean/decontaminate the outside of any residue and move to wash down station adjacent to EDF.
  - 3. **Fireproofing or Architectural Finish on Scratch Coat:** Spray with a fine mist of amended water or removal encapsulant. Allow time for saturation to the substrate. Do not over saturate causing excess dripping. Scrape material from substrate. Remove material in manageable quantities and control falling to staging or floor. If the falling distance is over 20 feet (6M), use a drop chute to contain material through descent. Remove residue remaining on the scratch coat after scraping is done using a stiff bristle hand brush. If a removal encapsulant is used, remove residue completely before the encapsulant dries. Re-wet the substrate as needed to prevent drying before the residue is removed.
  - 4. Fireproofing or Architectural Finish on Wire Lath: Spray with a fine mist of amended water or removal encapsulant. Allow time to completely saturate the material. Do not over saturate causing excess dripping. If the surface has been painted or otherwise coated, cut small holes as needed and apply amended water or removal encapsulant from above. Cut saturated wire lath into 2 by 6 feet (50 by 150 mm) sections and cut hanger wires. Roll up complete with ACM, cover in burlap and hand place in disposal bag. Do not drop to floor. After removal of lath/ACM, remove any over spray on decking and structure using stiff bristle nylon brushes. Depending on hardness of over spray, scrapers may be needed for removal.
  - 5. Pipe Insulation: Remove the outer layer of wrap while spraying with amended water in order to saturate the ACM. Spray ACM with a fine mist of amended water or removal encapsulant. Allow time to saturate the material to the substrate. Cut bands holding pre-formed pipe insulation sections. Slit jacketing at the seams, remove and hand place in a disposal bag. Do not allow dropping to the floor. Remove molded fitting insulation/mud in large pieces and hand place in a disposal bag. Remove any residue on pipe or fitting with a stiff bristle nylon brush. In locations where pipe fitting insulation is removed from fibrous glass or other non-asbestos insulated straight runs of pipe, remove fibrous material at least 6 inches from the point it contacts the ACM.

#### 3.4 REMOVAL OF ACM/DIRT FLOORS AND OTHER SPECIAL PROCEDURES

- A. Major Abatement on Dirt Floors: When working on dirt floors, pick up all chunks of visible asbestos debris using wet methods if possible after set-up of PDF, EDF, negative air systems as required. Perform work and decontaminate/clean-up; perform lock-down as needed and complete work as required under these specifications. The asbestos contaminated soil (ACS) shall be removed, encapsulated, and enclosed.
  - 1. **Remove ACS** to a minimum depth of 2 inches. After wetting to minimize dust, shovel dirt into disposal bags. The Project CIH shall closely monitor work conditions and take appropriate action to protect workers from exposure to asbestos and heat stress. The minimum number of air changes per hour shall be six using negative air machines.
  - 2. The Contractor has the option to encapsulate soil. A test area of a minimum of 100 sq. ft. must be performed to determine feasibility. Provide a written proposal for encapsulation to the AOC/SOHB representative with test results; recommendation from the manufacturer; a guarantee of performance for 10 years; and any limitations of application. The AOC reserves the right to accept or reject the application proposal with no effect on the contract. If approved, the application and supervision must be done by persons certified by the manufacturer as trained and experienced personnel as evidenced by documentation of such.
  - Enclosure of ACM using a concrete layer of 2 inches over the entire surface may also be done. Thoroughly dampen soil first before pouring concrete. Personnel shall be proficient in concrete laying as well as asbestos trained.

#### 3.5 NEGATIVE PRESSURE GLOVEBAG METHOD OF ASBESTOS REMOVAL:

- A. General: The glovebag method may be used where the total length of asbestos insulation to be removed in a pipe segment between existing ACM insulation to remain does not exceed 3 feet. The glovebag method may not be used for steam, steam condensate return and heating water piping unless the system is inactive or the surface temperature of the pipe is below 140 degrees F. Respiratory protection and disposable clothing are required. Discard clothing in accordance with paragraph Disposal of Friable Asbestos.
- B. Procedure: Install the glovebag and negative pressure equipment following all procedures outlined in OSHA's 29 CFR 1926.1101.
- C. Removal and Disposal of Glovebags: Removal of glovebags shall be in accordance with 29 CFR 1926.1101. Dispose of glovebags, material, and contaminated equipment in accordance with paragraph Disposal of Friable Asbestos.

#### 3.6 MINI-ENCLOSURE SYSTEM

- A. General: A mini-enclosure system is defined as any portable system capable of performing small scale short duration projects equipped with all aspects of a full containment. This includes, but is not limited to the following components: negative air pressure, shower or water-tank facilities, HEPA vacuums, and polyethylene sheeting barriers.
- B. A mini-enclosure system may be used when minor disturbances to asbestos-containing ceiling, wall, or floor materials are required and when the ceiling, wall or floor surface is flat and capable of obtaining the required air seal. Mini-enclosures shall not exceed a projected floor area of thirty square feet unless approved by the Architect. This system applies to the following activities:
  - 1. **Removal** of non-asbestos lay-in ceiling panels with asbestos debris on the top ceiling panel surface.
  - 2. **Removal** of asbestos-containing lay-in or spline ceiling panels.
  - 3. Removal of light fixtures in plaster ceilings to access ceiling spaces.
  - Removing or installation of light fixtures.
  - 5. **Cutting or channeling** of walls and plaster ceilings (e.g., hanging conduit or other such projects necessitating disturbance to the asbestos surfaces).
  - 6. Removal of asbestos-containing floor tile and mastic.
  - Removal of asbestos-containing duct mastic.
  - 8. Removal of transite asbestos panel boards, baseboard and mastic.
- B. **Procedure**: Utilize a negative pressure mini-enclosure system for this work. This process will follow all procedures outlined in OSHA's 29 CFR 1926.1101. The following steps are to be when performing this work:
  - Preliminary setup: Seal all critical barriers (e.g., doors, windows, vents) in the work
    area. Place OSHA warning signs as necessary facing outward on perimeter doors.
    Pre-clean area beneath work by wet wiping and HEPA vacuuming. Place drop cloth on
    surfaces below work and seal ir to floor with duct tape. Disconnect, as necessary, the
    electric and lock out power to breaker. Check and pressurize water within holding
    tanks and nozzles on the enclosure system. Provide ground-fault protection for other
    outlets.
  - 2. Preliminary Inspection: Project CIH will inspect area prior to commencement of work. Verify that all preliminary set-up procedures, as stated above, have been completed. Verify that all filters are properly positioned in HEPA vacuums and negative air machines (NAM). Verify all equipment is operating properly. Review, with contractor, the CIH Approved Plan of Action specified in "Submittals" in Part 1 of this specification.
  - 3. Work Procedures: Workers will don two (2) suits, gloves and appropriate respiratory protection in accordance with 29 CFR 1910.134. Workers will activate the negative air system associated with the mini-enclosure. The workers, in accordance with all applicable Federal and District of Columbia regulations, will perform necessary removal and/or encapsulation of asbestos containing material. Non-asbestos

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- containing material to be salvaged, as stated in scheduled work plan, shall be properly decontaminated prior to its removal from the work area.
- 4. **Waste Removal:** All asbestos containing materials shall be sufficiently wet and placed in bags, drums, or other approved and labeled disposal containers. All waste disposal containers shall be properly decontaminated. Disposal shall be performed as specified in "Cleanup and Disposal" below.
- 5. Decontamination Procedures: Thoroughly clean via wet wiping and HEPA vacuuming all surfaces within the mini-enclosure so that no visible residue remains. Workers will decontaminate by HEPA vacuuming the outer protective suit. Workers will reinspect the area for visible residue, clean as necessary, then decontaminate the inner protective suit. Once entire area is completely decontaminated, the workers may remove and properly dispose of the second suit and shower. Once showered, the worker may exit the mini-enclosure system and remove respiratory protection. If a remote shower facility is utilized, the workers shall follow the same procedure as stated above, however, the second suit shall be removed upon entering the remote shower facility.
- 6. Final Visual Inspection: Once all work for the specified area has been completed and workers have exited the mini-enclosure system, the Project CIH will enter the enclosure system to perform a final visual inspection to insure that there is no visible residue and all work has been completed.
- 7. **Final Air Sample Clearance:** The following final clearance sampling procedure shall be followed for mini-enclosure systems. If the work area passes final visual inspection, a final clearance air sample shall be conducted by the Project CIH inside the mini-enclosure system. The clearance air sample will have a total volume of at least 1200 liters of air and shall be analyzed by Phase Contrast Microscopy (PCM) following the NIOSH 7400 method A rules. This sample shall be read on-site by the Project CIH. Upon failure of the clearance sample by PCM analysis, another sample shall be conducted and analyzed by Transmission Electron Microscopy (TEM) and submitted to an accredited laboratory with all extra cleaning and sampling at no cost to the Government.
- 8. **Post-Clearance:** Upon clearance of the mini-enclosure system both by visual and air sampling, the system can be used at another location, leaving the previous work area non-hazardous for other trades to perform routine work.

## 3.7 QUALITY CONTROL:

- A. **Monitoring:** Monitoring of airborne concentrations of asbestos shall be in accordance with 29 CFR 1910.1001, 29 CFR 1926.1101, ASTM E 849, and this specification.
  - 1. **Monitor the airborne concentration** of asbestos before constructing the containment work area, to obtain a baseline fiber concentration in the affected areas. If the baseline air monitoring results, exceeds 0.01 f/cc immediately notify the AOC/SOHB.
  - 2. Monitor continuously during the course of the work inside the asbestos work area and other areas as directed by the Project CIH's air sampling strategy. In addition to that sampling strategy, and at a minimum, perform daily monitoring outside the entrance to the asbestos work area, along each perimeter wall of the containment and at the

- exhaust opening of the local exhaust system. If monitoring shows airborne concentrations greater than the asbestos control limits permitted by this specification, immediately stop all work, and notify the AOC/SOHB. Work shall not be restarted without approval of the Project CIH and the AOC/SOHB.
- 3. **In addition,** monitor the airborne concentrations of asbestos after final cleanup and removal of the enclosure of the asbestos control area in accordance with paragraph "Final Cleanup and Removal of Enclosures."
- B. Site Inspection and Stop Work Orders: While performing asbestos abatement work, the Contractor shall be subject to on site inspection by agency officials or agency contracted inspection services. Work shall also be subject to inspection by OSHA and EPA inspectors and/or local building or health officials. If found to be in violation by one of these officials, the Contractor shall cease all work immediately. Until the violation is resolved, standby time required to resolve the violation shall be at the Contractor's expense. Five complete sets of equipment (such as respirators and disposable clothing) required for entry to the asbestos control area shall be available for inspectors use.

#### 3.8 CLEANUP AND DISPOSAL:

- A. **Permits and Notifications:** Secure necessary permits in conjunction with asbestos removal, hauling and disposition and provide timely notification of such actions, as may be required by Federal, state, regional, and local authorities. When required by regulation, ensure that notification to the Regional Office of the EPA and the responsible agency for the District of Columbia is made,; provide copies of the notification to the AOC/SOHB 20 days prior to the commencement of the work. Provide notification in accordance with 40 CFR 61.22(d)(1).
- B. Housekeeping: Essential parts of asbestos dust control are housekeeping and cleanup procedures. All surfaces throughout the containment work area shall be maintained free of accumulations of asbestos fibers to prevent further dispersion. Give meticulous attention to restricting the spread of dust and debris, keep waste from being distributed over the general area. Use approved industrial vacuum cleaners with a HEPA filters to collect dust and small scrap. The use of compressed air is forbidden. Post appropriate asbestos hazard warning signs. At the end of each work shift, the containment area shall be cleaned. Equip personnel engaged in cleaning up asbestos scrap and waste with necessary respiratory equipment and protective clothing.
- C. Disposal of Friable Asbestos: Collect and dispose of friable asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing which may produce airborne concentrations of asbestos fibers in disposal bags or containers approved as specified in Part 1 above for post-award submittals. Prior to placing in bags or containers, thoroughly wet down asbestos wastes to reduce airborne concentrations. All asbestos waste shall be double bagged, wrapped or contained in accordance with 40 CFR Subpart M. At the end of each work shift, all waste asbestos materials shall be removed from the containment. Obtain approval from the AOC/SOHB and affected AOC building Superintendent's office, when the removal of the containerized asbestos waste is scheduled from the containment area. The contractor shall make arrangements for the transportation and disposal of all asbestos waste generated under this specification in accordance with all Federal regulations

at a sanitary landfill that meets EPA requirements. The Contractor will provide the AOC/SOHB with a copies of all Waste Shipment Records, hauler's receipts, and landfill receiving tickets resulting from the disposal of the asbestos waste as specified in Part 1 above for disposal receipt submittals. Establishment of any on-site temporary holding area for properly packaged asbestos waste must have prior approval from the AOC/SOHB. At no time shall the Contractor receive any asbestos-containing waste from other jobs, compliance inspectors or other sources without prior approval from the AOC/SOHB.

- D. Final Cleanup: The Contractor shall notify the AOC/SOHB and the Project CIH that the work area is ready for final inspection. The Project CIH shall inspect the work area prior to performing final air sampling. Visual observation of asbestos materials, dust or debris is not permitted on any surface in or around the work area. Clean work area in accordance with EPA approved methods. Once the visual observation is satisfied apply a lock down encapsulant.
- E. Lock down encapsulation: Lock down encapsulation is an integral part of the ACM removal. At the conclusion of ACM removal and before final air sampling, all surfaces shall be encapsulated with a lock down encapsulant. Apply two coats of encapsulant in strict accordance with the manufacturer's instructions. Any deviation from the instructions must be approved by the AOC's representative in writing prior to commencing the work. Apply the first coat of encapsulant with an airless sprayer at a pressure and using a nozzle orifice as recommended by the manufacturer. If the surface has been allowed to dry, wet wipe or HEPA vacuum prior to spraying with encapsulant. Apply a second coat over the first coat in strict conformance with the manufacturer's instructions. Color the encapsulant and contrast the color in the second coat so that visual confirmation of completeness and uniform coverage of each coat is possible. Adhere to the manufacturer's instructions for coloring. At the completion of the encapsulation, the surface must be a uniform third color produced by the mixture.
  - Exposed Edges: Seal edges of ACM exposed by removal work such as ACM left due
    to being outside the scope of work for this contract, or is inaccessible such as a sleeve
    or wall penetration, with one coat of penetrating encapsulant and one coat of bridging
    encapsulant. Prior to sealing, permit the exposed edges to dry completely in between
    the coats to permit penetration of the encapsulant.
- F. Final Air Sampling: Perform air sampling for clearance purposes in accordance with current District of Columbia or State of Maryland regulations, as applicable. Copies of the clearance air sample results are to be faxed to the District of Columbia Department of Health, Air Quality Division or Sate of Maryland, as applicable.
- G. **Removal of Enclosure:** If asbestos concentrations do not exceed clearance criteria, contact the AOC/SOHB for authorization for the removal of the enclosure. Ensure that copies of the clearance air sample results are telefaxed to the District of Columbia Department of Health, Air Quality Division.
- H. **Re-Occupancy Inspection:** The Contractor shall notify the AOC/SOHB and the Project CIH that the work area is ready for re-occupancy inspection. The Project CIH, shall inspect

the work area after removal of the enclosure and shall ensure that no visible debris is observed. If visible debris is observed, the Contractor shall clean the work area as directed by the Project CIH, in accordance with EPA approved methods until no visible debris are observed. The Project CIH shall provide verbal re-occupancy approval to the AOC/SOHB immediately after this inspection. Documentation of the re-occupancy inspection shall be provided to the AOC/SOHB within 24 hours after approving an area for re-occupancy.

# 3.9 SCHEDULE OF MINIMUM PROCEDURES FOR SPECIFIC AREAS

- A. Areas are identified on the drawings. Plan asbestos removal work and field verify actual extent of areas where each procedure is required. Architect shall survey areas and approve work plans; notify Architect no less than 7 days in advance. Unit prices shall be used to adjust changes to the Contract Sum.
- B. Scheduled procedures are minimum requirements for each type and location of asbestos removal; additional tasks and procedures may be required by individual field conditions or directed by Architect or CIH.
- C. Develop procedures for the following work items:
  - 1. Areas to remove baseboard molding with asbestos-containing mastic.
  - Areas to remove asbestos-containing duct insulation to permit new duct connections or rerouting existing ducts.
  - Areas to remove asbestos-containing pipe insulation to permit new pipe connections or rerouting existing pipes.

**END OF SECTION 028213** 

## SECTION 028313 - LEAD ABATEMENT PROCEDURES

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

A. This section specifies abatement and disposal of lead containing products and controls needed to limit occupational and environmental exposure to lead hazards.

#### 1.2 SCOPE OF WORK

- A. Prior to starting work, the contractor will perform testing of all surfaces to be disturbed. If lead-based paint is detected, the contractor shall submit a proposed change to abate the lead-based paint in all areas to be disturbed.
  - If lead based paint is detected above the permissible levels outlined in this specification section and applicable publications, the contractor shall submit a proposed change to abate the lead based paint in all areas to be disturbed.

#### 1.3 APPLICABLE PUBLICATIONS

A. **The publications** listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

## B. CODE OF FEDERAL REGULATIONS (CFR):

CFR 29 Part 1910	Occupational Safety and Health Standards
CFR 29 Part 1926	Safety and Health Regulations for Construction
CFR 40 Part 148	Hazardous Waste Injection Restrictions
CFR 40 Part 260	Hazardous Waste Management System: General
CFR 40 Part 261	Identification and Listing of Hazardous Waste
CFR 40 Part 262	Standards Applicable to Generators of Hazardous Waste
CFR 40 Part 263	Standards Applicable to Transporters of Hazardous Waste
CFR 40 Part 264	Standards for Owners and Operations of Hazardous Waste Treatment,
	Storage, and Disposal Facilities
CFR 40 Part 265	Interim Status Standards for Owners and Operators of Hazardous
	Waste Treatment, Storage, and Disposal Facilities
CFR 40 Part 268	Land Disposal Restrictions
CFR 49 Part 172	Hazardous Material Table, Special Provisions, Hazardous Material
	Communications, Emergency Response Information, and Training
	Requirements
CFR 49 Part 178	Specifications for Packaging

# C. National Fire Protection Association (NFPA):

NFPA 701-1989

Methods of Fire Test for Flame-Resistant Textiles and Films

# D. National Institute For Occupational Safety And Health (NIOSH)

NIOSH OSHA Booklet 3142 Lead in Construction

## E. Underwriters Laboratories(UL):

UL 586-1990 High-Efficiency, Particulate, Air Filter Units

# F. American National Standards Institute:

Z9.2-1979(R1991) Fundamentals Governing the Design and Operation of Local Exhaust Systems.

G. HUD's Guidelines For the Evaluation and Control of Lead - Based Paint Hazards in Housing

#### 1.4 **DEFINITIONS**

- A. Action Level: Employee exposure, without regard to use of respirations, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8-hour period. As used in this section, 30 micrograms per cubic meter of air" refers to the action level.
- B. **Area Monitoring**: Sampling of lead concentrations which is representative of the airborne lead concentrations which may reach the breathing zone of personnel potentially exposed to lead.
- C. Physical Boundary: Area physically roped or partitioned off around an enclosed lead control area to limit unauthorized entry of personnel. As used in this section, "inside boundary" shall mean the same as "outside lead control area."
- D. Certified Industrial Hygienist (CIH): As used in this section, refers to an Industrial Hygienist employed by the contractor and is certified by the American Board of Industrial Hygiene in comprehensive practice.
- E. Change Rooms and Shower Facilities: Rooms within the designated physical boundary around the lead control area equipped with separate storage facilities for clean protective work clothing and equipment and for street clothes which prevent cross- contamination.
- F. Competent Person: A person capable of identifying lead hazards in the work area and is authorized by the contractor to take corrective action.
- G. **Decontamination Room:** Room for removal of contaminated personal protective equipment (PPE).

- H. **Eight-Hour Time Weighted Average (TWA):** Airborne concentration of lead averaged over an 8-hour workday to which an employee is exposed.
- I. High Efficiency Particulate Air (HEPA) Filter Equipment: HEPA filtered vacuuming equipment with a UL 586 filter system capable of collecting and retaining lead-contaminated paint dust. A high efficiency particulate filter means 99.97 percent efficient against 0.3 micron size particles.
- J. Lead: Metallic lead, inorganic lead compounds, and organic lead soaps. Excluded from this definition are other organic lead compounds.
- K. Lead Control Area: An enclosed area or structure with full negative pressure containment to prevent the spread of lead dust, paint chips, or debris of lead-containing material removal operations. The lead control area is isolated by physical boundaries to prevent unauthorized entry of personnel.
- L. Lead Permissible Exposure Limit (PEL): Fifty micrograms per cubic meter of air as an 8-hour time weighted average as determined by 29 CFR 1926.62. If an employee is exposed for more than 8 hours in a work day, the PEL shall be determined by the following formula. PEL (micrograms/cubic meter of air) = 400/No. of hrs worked per day
- M. Personnel Monitoring: Sampling of lead concentrations within the breathing zone of an employee to determine the 8-hour time weighted average concentration in accordance with 29 CFR 1926.62. Samples shall be representative of the employee's work tasks. Breathing zone shall be considered an area within a hemisphere, forward of the shoulders, with a radius of 150 mm to 225 mm (6 to 9 inches) and the center at the nose or mouth of an employee.
- N. Architect: The Architect of the Capitol.

## 1.5 QUALITY ASSURANCE

- A. **Before exposure** to lead-contaminated dust, show evidence that workers have completed the comprehensive medical examination as required by 29 CFR 1926.62 (I) (1) (i) & (ii). The examination shall not be required if adequate records show that employees have been examined as required by 29 CFR 1926.62(i) within the last year.
- B. Medical Records: Maintain complete and accurate medical records of employees in accordance with 29 CFR 1910.20.
- C. The Contractor shall engage the services of an Certified Industrial Hygienist (CIH) certified by the American Board of Industrial Hygiene (ABIH). Selection of the CIH is subject to approval of the Architect. The CIH will be responsible for, but not limited to the following:
  - 1. **Certify** Training.
  - 2. **Review, approve and submit** to the Architect's representative, all lead-containing material removal plan for conformance to the applicable referenced standards.

- 3. **Inspect and or oversee** the inspection of, all lead-containing material removal work for conformance with the approved plan.
- 4. **Develop** a monitoring plan and/or perform the monitoring. This is to include samples to test airborne levels of lead to determine exposure.
- 5. Ensure work is performed in strict accordance with specifications at all times.
- 6. **Ensure hazardous exposure** to personnel and to the environment are adequately controlled at all times.
- 7. Visually inspect all lead control areas for cleanliness and perform floor dust wipe testing.
- 8. **Review and approve** and submit to the Architect's representative, all sampling data within the time frames outlined in this specification.
- 9. **Review, approve and submit** to the Architect, the Contractor's lead compliance program in accordance with 29 CFR 1926.62(e)(2).
  - a. The CIH may delegate the performance of his work, (except for the reviews and approval of plans, programs and sampling strategies), to Industrial Hygienist (IH) he selects, who are qualified by virtue of their training and work experiences to perform tasks. The CIH shall supervise the IH or all of the IH (s) and will be responsible for and review all results of their work. The selection of the CIH and the IH (s), is subject to approval of the Architect.
- D. **Training:** Train each employee performing lead paint removal, lead containing material removal, disposal, and air sampling operations prior to the time of initial job assignment, in accordance with 29 CFR 1926.62.
- E. **Training Certification:** The CIH shall certify all contractor employee Lead Training Certificates. These documents shall be submitted to the Architect as directed by section 1.6.D.6.c of this specification.

# F. Respiratory Protection Program:

- 1. Furnish each employee required to wear a negative pressure respirator or other appropriate type with a respirator fit test at the time of initial fitting and at intervals that are required by 29 CFR 1910.134.
- The contractor shall establish and implement a respiratory protection program that has been approved and certified by the project CIH as required by 29 CFR 1910.134, 29 CFR 1910.1025, and 29 CFR 1926.62.
- G. Hazard Communication Program: The contractor shall establish and implement a Hazard Communication program that has been approved and certified by the project CIH as required by 29 CFR 1910.1200. Once approved by the Architect and before any work starts, the contractor shall implement this plan.

## I. Safety and Health Compliance:

 In addition to the detailed requirements of this specification, comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding removing, handling, storing, transporting, licensing and disposing of lead waste materials.

- Comply with the applicable requirements of the current issue of 29 CFR 1926.62 and this specification. Submit matters regarding interpretation of standards to the Architect for resolution before starting work.
- 2. **Where specification** requirements and the referenced documents vary, the most stringent requirements shall apply.
- J. Pre-Construction Conference: Ten (10) days before beginning any lead containing material removal, the CIH and removal contractor shall meet with the Architect's Occupational Health, Environmental, and Safety Office representative to discuss in detail the lead-containing paint and or material removal work plan. The topic of the Pre-Construction Conference shall include work procedures and precautions for the work plan.
- K. Supervision: The competent person assigned to this operation by the contractor, shall be required to be onsite and supervising any and all work being performed inside the Lead Control area.

### 1.6 SUBMITTAL

A. General: No work involving the removal of lead containing materials shall begin until all submittals required by this specification are approved by the Architect.

## B. Hazardous Waste Management:

- Submit a Hazardous Waste Management Plan within 14 days after award of contract
  to the Architect for approval. The Hazardous Waste Management plan shall comply with
  applicable requirements of Federal, State, and local hazardous waste regulations and
  address:
  - Procedures to segregate abatement wastes into separate waste streams to minimize the quantity of hazards waste generated.
  - b. Testing to identify hazardous wastes associated with the work.
  - c. Estimated quantities of wastes to be generated and disposed of.
  - d. Transporter / disposal facility documentation including, name, location, EPA identification number, hazardous waste permits and a 24 hour point of contact.
  - e. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes.
  - f. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
  - g. Spill prevention, containment, and cleanup contingency measures to be implemented.
  - Procedures and schedule for waste containment, removal and disposal. Wastes shall be cleaned up and containerized daily.
- Obtain Architect's generator EPA identification number from the Architect. Contact
  the Architect's Safety and Occupational Health Branch's representative for this
  information.

## B. Manufacturer's Catalog Data:

- 1. HEPA Vacuums
- 2. Respirators
- 3. HEPA filtered negative air machines.
- 4. LBP Removal Chemicals.
- All other tools or equipment that the contractor plans on using to remove Lead -Containing materials.
- C. Instructions: Paint removal materials. Include applicable material safety data sheets.

# D. Statements Certifications and Statements:

- 1. Qualifications of CIH: Submit to the Architect for approval the name, address, and telephone number of the CIH selected to perform responsibilities in paragraph entitled "CIH Responsibilities." Provide previous experience of the CIH on five (5) projects of comparable size, cost and complexity. Submit proper documentation that the Industrial Hygienist is certified by the American Board of Industrial Hygiene in comprehensive practice, including certification number and date of certification/re-certification.
- Qualifications of Competent Person: Submit to the Architect for approval the name, address, and telephone number of the Competent Person assigned to supervise this operation. Provide all previous experience of the Competent Person related to Lead Abatement operations.
- 3. **Testing Laboratory:** Submit to the Architect for approval, the name, address, and telephone number of the testing laboratory selected to performing the analysis and reporting of airborne concentrations of lead wipes, and TCLP sampling. Provide proper documentation that persons performing the analysis have been judged proficient by successful participation within the last year in the American Industrial Hygiene Association (AIHA). Environmental Lead Proficiency Analytical Testing Program (ELPAT). The laboratory shall be accredited by the American Industrial Hygiene Association (AIHA). Provide AIHA and ELPAT documentation along with date of accreditation / re-accreditation.
- 4. Lead-Containing Material Removal Plan: Ten (10) days before work starts, submit to the Architect for approval, a detailed job-specific plan, approved by the CIH, of work procedures to be used in the removal of lead-containing paint or materials. The plan shall include the name of the Competent Person assigned to supervise the operation, a sketch showing the location, size, and details of lead control areas, type of containment materials used, location and details of decontamination rooms, change rooms, shower facilities, and HEPA filtered mechanical ventilation system.
  - a. Include in the plan, eating, drinking, smoking and restroom procedures, interface of trades, sequencing of lead related work, collected wastewater and lead paint and/or lead containing material debris disposal plan, air sampling plan, respirators, protective equipment, and a detailed description of the method of containment of the operation to ensure that airborne lead concentrations of 30 micrograms per cubic meter of air are not exceeded outside of the lead control area.

- b. Include air and floor wipe sampling, strategy, sampling methodology, frequency, duration of sampling, and qualifications and training of air monitoring personnel in the sampling portion on the plan.
- 5. Field Test Reports: Monitoring Results: Submit all monitoring results to the Architect's Occupational Health, Environmental, and Safety Office representative, by the <u>next work day</u>. All monitoring and floor wipe test results shall be signed by the testing laboratory, the employee performing the sampling, the employee that analyzed the sample, and the CIH. The quickest turn around time available, shall be used for all floor wipe tests, taken to clear a lead control area.

### 6. Records:

- Submit completed and signed hazardous waste manifest from treatment or disposal facility.
- b. Before work starts, submit to the Architect for approval, certification of Medical Examinations as required by 29 CFR 1926.62. The CIH shall certify that all employees, who will be engaged in lead containing material removal operations, have been medically cleared as required by 29 CFR 1926.62.
- c. Before work starts, submit to the Architect for approval, certification of employee training certified by the CIH.
- d. Before work starts, submit to the Architect for approval, the CIH approved, the contractor's employee respiratory protection program.
- e. Before work starts, submit to the Architect for approval, certification of employees respirator fit testing certified by the CIH.
- f. Before work starts, submit to the Architect for approval, the CIH approved copy of the Hazard Communication Program as required by 29 CFR 1910.1200.
- g. Before work starts, submit to the Architect for approval, the Contractor's CIH approved lead compliance program in accordance with 29 CFR 1926.62(e)(2).

## **PART 2 PRODUCTS**

### 2.1 PAINT REMOVAL PRODUCTS:

A. Submit for approval, applicable Material Safety Data Sheets for paint removal products used in paint removal work. Use the least toxic product, suitable for the job and acceptable to the CIH.

## **PART 3 EXECUTION**

#### 3.1 PROTECTION

- A. **Notification:** Notify the Architect's Occupational Health, Environmental, and Safety Office representative 10 days prior to the start of any lead abatement work.
- B. Lead Control Area Requirements:

- 1. **Establish a lead control area** by completely enclosing with 6 mil poly, where lead-containing material removal operations will be performed.
- 2. Contain removal operations by the use of a negative pressure full containment system with at least one change room and with HEPA filtered exhaust, exhausted to the outside of the building. The negative pressure containment, shall have a minimum of 6 air changes per hour. The contractor shall maintain a -0.020 column inches of water pressure differential, relative to outside pressure. This measurement shall be recorded and maintained within the enclosure as evidenced by manometric measurements and maintained around the clock, or until authorization for containment removal is obtained from the Architect. Hourly readings shall be recorded while lead removal work is being performed. Anytime the negative pressure is less than -0.020 column inches of water pressure differential, relative to outside pressure, all lead removal work inside the containment will stop. The work may be restarted only after the negative pressure is restored to a level of -0.020 column inches of water pressure differential or greater, relative to outside pressure.
- C. Protection of Existing Work to Remain: Perform Lead Containing Material removal work without damage or contamination of adjacent areas. Where existing work is damaged or contaminated, the contractor will restore it to its original condition.
- D. **Boundary Requirements:** Provide physical boundaries around the lead control area by sealing off the area [ As designated on the approved work plan] to ensure that airborne concentrations of lead will not reach 20 micrograms per cubic meter of air outside of the lead control area.
- E. **Heating, Ventilating and Air Conditioning (HVAC) Systems:** Shut down, lock out, and isolate HVAC systems that supply, exhaust, or pass through the lead control areas. Seal intake and exhaust vents in the lead control area with 6-mil plastic sheet and tape. Seal seams in HVAC components that pass through the lead control area.
- F. Change Room and Shower Facilities: Provide clean change rooms and shower facilities within the physical boundary around the designated lead control area in accordance with requirements of 29 CFR 1926.62.
- G. Mechanical Ventilation System:
  - Use adequate ventilation to control personnel exposure to lead in accordance with 29 CFR 1926.62.
  - 2. Contain removal operations by the use of a negative pressure full containment system with at least one change room and with HEPA filtered exhaust, exhausted to the outside of the building. The negative pressure containment, shall have a minimum of 6 air changes per hour. The contractor shall maintain a -0.020 column inches of water pressure differential, relative to outside pressure. This measurement shall be recorded and maintained within the enclosure as evidenced by manometric measurements and maintained around the clock, or until authorization for containment removal is obtained from the Architect. Hourly readings shall be recorded while lead removal work is being performed. Anytime the negative pressure is less than -0.020 column inches of water pressure differential, relative to outside pressure, all lead removal work inside the

containment will stop. The work may be restarted only after the negative pressure is restored to a level of -0.020 column inches of water pressure differential or greater, relative to outside pressure.

- H. Personnel Protection: Personnel shall wear and use protective clothing and equipment as specified herein. Eating, smoking, or drinking is not permitted in the lead control area. The CIH shall initially select the appropriate respiratory protection to be used by the employees as required by 29 CFR 1926.62.
- I. Warning Signs: Provide warning signs at approaches to lead control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area. Signs shall comply with the requirements of 29 CFR 1926.62.

### 3.2 WORK PROCEDURES

- A. Perform removal of Lead-Containing Material in accordance with approved Lead-Containing Material removal plan. The assigned Competent Person shall supervise the work and will be on site anytime work in the Lead Control area is on-going. This person shall use procedures and equipment required to limit occupational and environmental exposure to lead when Lead Containing Material is removed in accordance with 29 CFR 1926.62, except as specified herein. Dispose of removed Lead-Containing Material, any paint chips and associated waste in compliance with Environmental Protection Agency (EPA), federal, state, and local requirements.
- B. **Personnel Exiting Procedures:** Whenever personnel exit the lead-controlled area, they shall perform the following procedures and shall not leave the work until:
  - 1. Vacuum themselves off.
  - Remove protective clothing in the decontamination room, and place them in an approved impermeable disposal bag.
  - 3. Shower.
  - Change to clean clothes prior to leaving the physical boundary designated around the lead-contaminated job site.
- C. Monitoring: Monitoring of airborne concentrations of lead shall be in accordance with 29 CFR 1926.62 and as specified herein. Air monitoring, testing, and reporting shall be performed by a CIH or an Industrial Hygiene (IH) Technician who is under the direction of the CIH.
  - The CIH or the IH Technician under the direction of the CIH shall be on the job site
    directing the monitoring, and inspecting the Lead Containing Material removal work to
    ensure that the requirements of this specification have been satisfied during the entire
    Lead Containing Material removal operation.
  - 2. **Personal air monitoring samples** shall be taken on employees who are anticipated to have the greatest risk of exposure as determined by the CIH.
  - 3. **Submit results of air monitoring samples**, signed by the CIH, by the next work day after the air samples are taken. Notify the Architect immediately of exposure to lead at or in

excess of the action level of 30 micrograms per cubic meter of air outside of the lead control area.

# D. Monitoring During Lead-Containing Material Removal Work:

- Perform personal and area monitoring during the entire Lead-Containing Material removal operation. Sufficient area monitoring shall be conducted at the physical boundary outside the lead control area to ensure unprotected personnel are not exposed above 20 micrograms per cubic meter of air.
  - a. If the outside boundary lead levels are at or exceed 20 micrograms per cubic meter of air, work shall be stopped and the CIH shall notify the Architect immediately.
    - The CIH shall immediately investigate, perform necessary air and/or wipe sampling and render a decision as whether these areas are contaminated are not. The findings of the investigation and the results of any samples taken, shall be reported to the Architect <u>immediately</u>.
    - 2) If the area investigated by the CIH is found to be contaminated with lead, the following procedures shall be followed:
      - Work in all lead containment operations shall remain halted.
      - b) The contractor shall decontaminate (clean up) the contaminated area.
      - c) The CIH shall determine the source and cause of the contamination, along with the necessary corrective measures to be taken.
      - d) The contractor shall decontaminate the contaminated area using the corrective measures outlined by the CIH.
      - e) The CIH shall visually inspect the "contractor cleaned" contaminated area and perform floor wipe tests. The number of floor wipe tests will be determined by the CIH. Results of the floor wipe tests shall be less than 100 µg/ft². The CIH shall submit copies of all sample results along with a certification that the area is no longer contaminated with lead.
      - f) If on the second try, the contractor is unable to achieve a floor wipe sample result of less than  $100 \,\mu g/ft^2$  for a particular area, the following procedures shall be followed:
        - The CIH shall render a decision as to what clearance level would be achievable for that particular area.
        - The CIH shall submit to the Architect this decision, along with copies of the sampling data for area, along with a certification that the area is no longer contaminated with lead.
      - G) The Architect will issue the authority to restart work in the lead control area, once the CIH certifies to the Architect, that the contaminated area has been successfully decontaminated.

- 2. The CIH shall review the sampling data collected on that day to determine if condition(s) requires any further change in work methods. Removal work shall resume when approval is given by the Architect.
- 3. The Contractor shall control the lead level outside of the work boundary to less than 30 micrograms per cubic meter of air at all times. As a minimum, conduct area monitoring daily on each shift in which Lead Containing Material removal operations are performed in areas immediately adjacent to the lead control area. If any outside the work boundary lead levels are at or exceed 30 micrograms per cubic meter of air, work shall be stopped and the CIH shall immediately correct the condition(s) causing the increased levels and notify the Architect immediately. Removal work shall resume when approval is given by the Architect.

### 3.3 LEAD-CONTAINING Material REMOVAL

- A. Remove Lead Containing Material within the areas designated on the approved Lead Containing Material removal plan in order to completely expose the substrate. Take whatever precautions are necessary to minimize damage to the underlying substrate.
- B. Indoor Lead-Containing Material Removal: Select Lead Containing Material removal processes to minimize contamination of work areas with lead-contaminated dust or other lead-contaminated debris/waste. This Lead Containing Material removal process shall be described in the Lead Containing Material removal plan approved by the Architect.
- C. After beginning the Lead-Containing Material removal operation or at the direction of the Architect, the following procedures shall be followed, concerning all reports of possible lead contamination in occupied spaces, within a building that has a Lead Control area:
  - The CIH shall immediately investigate, perform necessary air and/or wipe sampling and render a decision as whether these areas are contaminated and develop a corrective plan of action. The findings of the investigation and the results of any samples taken, shall be reported to the Architect <u>immediately</u>.
  - If the area investigated by the CIH is found to be contaminated with lead, the following procedures shall be followed:
    - Work in all lead containment operations shall be halted.
    - The contractor shall initiate the corrective plan of action plan developed by the CIH
      in order to decontaminate the area.
    - c. The CIH shall determine the source and cause of the contamination, along with the necessary corrective measures to be taken to prevent a reoccurrence.
    - d. Before any lead abatement work is restarted, the CIH must certify to the Architect, that the source and cause of the contamination has been corrected. Work may restart once approval from the Architect is received.
    - e. The CIH shall visually inspect the "contractor cleaned" contaminated area and perform floor wipe tests. The number of floor wipe tests will be determined by the CIH. Results of the floor wipe tests shall be less than 100 μg/ft². The CIH shall

- submit copies of all sample results along with a certification that the area is no longer contaminated with lead.
- f. If on the second try, the contractor is unable to achieve a floor wipe sample result of less than  $100 \ \mu g/ft^2$  for a particular area, the following procedures shall be followed:
  - The CIH shall render a decision as to what clearance level would be achievable for that particular area.
  - 2) The CIH shall submit to the Architect this decision, along with copies of the sampling data for area, along with a certification that the area is no longer contaminated with lead.

## 3.5 CLEANUP AND DISPOSAL:

- A. Cleanup: Maintain surfaces of the lead control area free of accumulations of Lead Containing Material chips and dust. Restrict the spread of dust and debris; keep waste from being distributed over the work area. Do not dry sweep or use compressed air to clean up the area. At the end of each shift and when the Lead Containing Material removal operation has been completed, clean the area of all visible Lead Containing Material contamination, dust and debris by vacuuming with a HEPA filtered vacuum cleaner and wet wipe and or mopping the area.
- B. Certification: The CIH shall certify in writing the following:
  - The inside and outside of each lead control area air monitoring samples are less than 30 micrograms per cubic meter of air.
  - The respiratory protection for the employees was adequate and the work procedures
    were performed in accordance with 29 CFR 1926.62 and this specification, and that there
    were no visible accumulations of lead-contaminated Lead Containing Material and dust
    on the work site.
  - 3. The CIH shall perform floor wipe test(s) by using methodology that is outlined in HUD's Guidelines for the Evaluation and Control of Lead Based Paint hazards in Housing. A Lead Control area is considered complete if all floor wipe sample results are below 100 μg/ft². Do not remove the lead control area or roped-off boundary and warning signs prior to the Architect's approval and receipt of the CIH's certification.
  - 4. **Re-clean and re-sample** any Lead Control area showing dust or residual Lead Containing Material (chips) or floor wipe sample results that are above 100µg/ft².
  - 5. **If after the second attempt**, the contractor is unable to achieve a floor wipe sample result of less than 100 g/ft² for a particular lead control area, the following procedures shall be followed:
    - The CIH shall render a decision as to what clearance level would be achievable for that particular control area.
    - b. The CIH shall submit to the Architect this decision, along with copies of the sampling data for containment removal approval.
    - c. The Architect may have the CIH's decision reviewed by a third party CIH.

C. **Testing of Lead-Containing Material Residue:** Where indicated or when directed by the Architect, test all potential Lead - Containing waste by following the Toxicity Characteristic Leaching Procedure (TCLP) for lead in accordance with 40 CFR 261.

# D. Disposal:

- Collect all potential lead-contaminated waste, including but not limited to, removed paint chips, abrasive blast medium, architectural components, scrap, debris, bags, containers, equipment, and lead-contaminated clothing.
- 2. For drummed waste, store in U.S. Department of Transportation (49 CFR 178) approved 55-gallon drums to identify the type of waste (49 CFR 172) and the date lead contaminated wastes were first put into the drum. For architectural components, e.g., doors, windows, and molding, store so as to prevent environmental contamination. Six mil plastic sheeting should be placed underneath and on top of the material; plywood or other durable material should be placed on top of the plastic to prevent it from being punctured. Transport waste in covered vehicle only.
- Periodically remove hazardous wastes so that 90 calendar day storage limitation is not exceeded.
- 4. Handle, store, transport, and dispose lead or lead-contaminated waste in accordance with 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, and 40 CFR 265. Comply with land disposal restriction notification requirements as required by 40 CFR 268.
- 5. Disposal Documentation: Submit written evidence that the hazardous waste transporter and the treatment, storage, or disposal facility (TSDF) is approved for lead disposal by the EPA and state or local regulatory agencies. Submit one copy of the completed manifest, signed and dated by the initial transporter in accordance with 40 CFR 262. Submit Certification of disposal from TSDF.

**END OF SECTION 028313** 

### SECTION 14212 - MODERNIZATION OF TRACTION ELEVATORS

#### PART 1 - GENERAL

### 1.1 SUMMARY:

- A. Extent: Provide all labor, materials, and equipment necessary for the modernization of existing elevator numbered S-4 at the U.S. Capitol, located at Independence Ave. & S. Capitol St., SW. -20515.
  - 1. Except where specifically stated, the following shall apply.
  - Provide all incidentals, not specifically listed, but required for safe and efficient operation of the elevator system or to comply with referenced codes.
  - Unless specifically stated otherwise, all existing elevator capabilities and functions shall
    continue to generate and accomplish that function after the modernization of that elevator.
  - 4. In-depth descriptions are in Part 2 products of this specification.
- B. The work shall include, but not necessarily be limited to, components utilizing the latest proven designs to accomplish the functions below. Provide new for all of the following, except where stated otherwise:
  - 1. Control System and Car Controls.
  - 2. Refurbish DC Gearless Basement Traction Hoist Machine.
  - SCR Drive.
  - Hall Lanterns.
  - Governor.
  - Safety Device.
  - 7. Refurbish Overhead Sheave Beams and Other Support Steel.
  - 8. Refurbish Struts and Headers.
  - Hoist way Doors.
  - 10. Hoist and Governor Ropes.
  - 11. Hoist way Access Switches.
  - 12. Hoist way Door Hardware.
  - 13. Normal and Final Stopping Devices and Pit Stop Switch.
  - 14. Refurbish Fascia, Toe Guards, Dust and Hanger Covers.
  - 15. Car Position Indicators.
  - 16. Car Sheave, Overhead Sheaves and Deflector Sheaves.
  - 17. Car and Counterweight Roller Guides.
  - 18. Car and Counterweight Buffers.
  - 19. Car Door Operators, Clutches, and Hardware.
  - 20. Car Top Control Stations.
  - 21. Car Enclosures.
  - 22. Car Entrance Detectors.
  - 23. Car Control Stations and Fixtures.
  - 24. Communications Systems.
  - Monitoring System.

- B. Project Verification of Material Condition: Coincidental with the progress of interfacing with various systems, all reused material associated with the interfacing shall be checked, modified and repaired or replaced, as necessary to restore it to first class condition.
  - Monitoring system: Coordinate with and update current monitoring system in the foreman's office in the U.S. Capitol. Both the foreman's and the assistant foreman's computers shall be able to monitor any group or single elevator.
  - 2. The present machine room will be retained. Provide all blockouts, cutting, patching painting and refinishing. Repair all surfaces disturbed by work associated with this project and finish to match and blend with the surrounding surface. Paint all elevator-related equipment except the governors (see Article "PAINTING AND FIELD FINISHING" of this section).
  - The present hoistways will be retained. Patch and re-finish wall and/or ceiling damaged by removal of existing operating and signaling devices. Refinished surfaces shall match and blend with the surrounding surfaces.
- C. Other Work: Coordinate the work listed below with other work under this Contract.
  - Lead Paint Abatement: The existing door jambs that are painted shall be tested for lead based paint prior to any removal. The Architect will arrange testing. Coordinate with the Architect. Submit the work plan for limited lead paint abatement to the Architect for approval.
  - Asbestos Abatement: The existing door panels likely contain asbestos. Double bag all
    removed door panels per EPA regulations and provide disposal documentation.
    Documentation will consist of copies of the Waste Shipment Record and copies of the
    Landfill Receipt.

#### 1.2 REFERENCES:

# A. Regulatory Requirements:

- Elevator Code: Except for more stringent requirements as indicated or imposed by governing regulations, comply with applicable requirements of the following ASME standards:
  - a. Safety Code for Elevators and Escalators ASME A17.1 (hereafter referred to as the "Code").
  - b. Inspectors' Manual, ASME A17.2.
  - c. Safety Code for Existing Elevators and Escalators, ASME A17.3.
- 2. NFPA Code: Comply with applicable requirements NFPA 70, "National Electric Code" (NEC), for electrical work.
- 3. IEEE Compliance: Comply with applicable requirements of IEEE Std. 241, "IEEE Recommended Practice for Electric Power Systems in Commercial Buildings" pertaining to wiring systems.
- Americans with Disabilities Act (ADA): Except as otherwise indicated, comply with the "Americans with Disabilities Act," including clearances, mounting heights, color/tactile requirements, control and locations for signal equipment, door timing cycles, and similar provisions.

## 1.3 SYSTEM DESCRIPTION:

- A. General: Design system to meet performance requirements stated in the Elevator Schedule and summarized below. The elevator shall have the capacity to lift a live load (exclusive of the weight of the car and cables) at the speed in feet per minute as specified in the Elevator Schedule at the end of this Section:
  - 1. Contract Speed: +/- 3% of rated speed under any loading condition. Rated speed shall mean speed in either direction of travel.
  - 2. Contract Capacity: Safely lower, stop and hold up to 125% of rated load.
  - 3. Stopping Accuracy: Adjust each elevator to provide accurate leveling within +/- 1/4" of the floor level under any loading condition without re-leveling.
  - 4. Door Opening Time: Seconds from start of opening to fully open: 3.7 seconds
  - Floor-to-Floor Performance Time: Seconds from start of doors closing until doors are 3/4
    open and car level and stopped at next successive floor under any loading condition or
    travel direction: 3.7 seconds.
  - 6. Passenger Waiting Times: Passenger waiting times in the elevators are measured by registration of hall calls, and shall meet the following minimum criteria during the traffic conditions of the day other than "up-peak." The requirements are predicated on not more than 150 calls being registered within the designated 15 minute period, and all cars in the group being used for passenger service during this period. Waiting time for service at floors not served by all elevators shall not be included in the verification of waiting time performance.
    - Average of all hall call waiting times in any 15 minute period shall not exceed 20 seconds.
    - b. 75% of all hall calls registered in any 15 minute period shall be answered within 30 seconds of registration.
    - c. 90% of all hall calls registered in any 15 minute period shall be answered within 60 seconds of registration.

## 1.4 SUBMITTALS:

- A. General: Submit product data, samples or shop drawings for all material/equipment to be furnished as part of the work in accordance with Conditions of the Contract and Division 1 specifications.
  - 1. Number of Items to be Submitted: Unless stated specifically elsewhere, deliver four (4) sets of each item below.
  - 2. Identification Criteria: On the surface of all manuals, the first title page of that manual, on all drawings, and all electronic diagrams provide the following:
    - Building Name
    - b. Elevator No(s). Addressed
    - c. Contract No.
    - d. Date.
    - e. Vendors Name, address, and current phone number.

- B. Product Data: Provide manufacturer's detailed technical product data and installation instructions for all equipment/materials. For each elevator unit, indicate capacities, sizes, performances, operations, safety features, finishes, and similar information. Indicate any variations from specified requirements. Submit MSDS for all paints and chemicals used in project.
- C. Drawings: Within thirty (30) working days of "Award of Contract," provide layout drawings, accessory and fixture drawings, and details for review. Dimensioned drawings (developed from field measurements taken by the Contractor) shall show elevations and details of machines, car enclosures, hoistway entrances, vertical hoistway and plan views. Include complete drawings of the elevator, hatchway, and machine room; and details of design and fabrication of doors, accessories and fixtures. Use standard architectural scales for all drawings.
  - 1. Provide "As-Built or Installed" drawings in final submittal phase.
  - Provide Elevator Interior Drawings showing front, rear and one side wall views, plus
    views of car top, cab floor level, and underside of car showing any new equipment plus
    penetrations such as the escape hatch. Show all necessary dimensions needed for
    fabrication of wall panels.
- D. Samples: Within thirty (30) working days of "Award of Contract," provide samples of all exposed finished items for approval. Provide samples of materials as outlined in this Section.
- E. Wiring Diagrams: Within thirty (30) working days of "Award of Contract," provide wiring diagrams of each elevator or first elevator of a group plus the group controller, showing the electrical connections of all elevator equipment in the hoistway as well as the machine room for approval. Ten (10) working days before completion of each elevator or first elevator of a group, provide complete sets of AS INSTALLED "single-line" wiring diagrams for that elevator or the first elevator of a group plus the group controller, showing the electrical connections of all elevator equipment in the hoistway as well as the machine room. (Two (2) sets of diagrams shall be reproducible polyester). Provide and continually update this set to reflect any changes made during installation and adjustments. These diagrams are the property of the Architect of the Capitol.
  - Wiring schematics depicting controller logic shall not contain any proprietary "black-box" functions that cannot be field-analyzed or verified during trouble calls or maintenance operations by Architect's personnel.
  - 2. Encase one (1) additional set of straight line wiring diagrams for each machine room, reduced to a 18" x 24", in clear laminated plastic sheets (10 mil min. thickness), front and back, suitable for hanging on hooks in a machine room.
- F. Electronic Schematics: Ten (10) working days before completion of first elevator, provide electronic schematics with all the necessary diagrams for trouble shooting and a complete description of the operational characteristics of the program. The program shall be read and understood through the use of a data link to the dispatch MS WINDOWS compatible computer, which will be part of the controller package. The program(s) shall keep a history of all recent events with which the controller is involved. The events include normal functions (use of elevators, availability, etc.), failures, personnel access and their actions. In addition to the legend information required for all shop drawings, provide the following:
  - Name and symbol of each component.

- Location on drawings, drawing sheet number and area of component.
- 3. Location of apparatus whether on controller, selector, motor generator, starter, hoistway or elevator car.
- G. Maintenance Manuals: Ten (10) working days before completion of the first elevator, provide the following items organized into a standard binder, with a table of contents and locator tabs:
  - Instructions explaining all operating features including all apparatus in the car and lobby control panels.
  - Lubrication charts indicating all lubricating points and type of lubricant recommended for all equipment.
  - Parts catalogs for all replaceable parts. The parts catalog shall be comprehensive and show breakdowns of intricate equipment with part numbers and descriptions and shall provide generic replacement part numbers cross referenced to part, system, and subsystem.
  - 4. Adjustor's manual, of the type utilized by Contractor's field adjustors in the calibration of the controller and door operator installed. Manuals shall contain step-by-step procedures for field adjustment and calibration of all equipment, including any and all printed circuit boards. Include a step-by-step sequence operation of the electrical circuitry from the initiation of a hall call through to the final stage of the elevator being ready to accept another hall call. This sequence of actions shall, clearly and concisely, refer to the straight line diagrams and mention each contact and/or device energized or de-energized.
- H. Electronic media submittal: One (1) month prior to Final Acceptance, submit two (2) sets of the following in electronic media on clearly labeled 3.5" MS/DOS formatted computer disks, or CD-ROM. Each file shall be clearly described in an accompanying typed, summary (index table) file which will include file name, size, and a short description.
  - Drawings: All single-line wiring diagram files (as-builts), layout drawings, and electronic wiring diagrams) shall be submitted in either MicroStation DGN, AutoCad DWG, CGM, or IGES format.
  - 2. Text (Instructions, Manuals, etc.): Where the Contractor has converted product data, instruction handbooks, and maintenance manuals to electronic format, and if that material has been formatted in Word Perfect (10.0 or newer) or .pdf format, submit copies of the referenced documents on electronic media. Any referenced text-based materials not converted to electronic format should be submitted by standard hard-copy methods. Photocopies are not acceptable.
- I. Keys: Ten (10) working days before completion of the elevator, eight (8) sets of keys to operate all keyed switches and locks shall be furnished upon completion. Keys shall be properly tagged. All keying shall be coordinated with the Government. Provide keys as follows:

Firemen's Service MFD-1
 Access and Inspection EPCO-2
 All others EPCO-1

J. Scavenged parts removed from the existing controllers, selectors and other equipment which are not declared surplus by the representative of the Architect shall be handed over to that representative for replacement parts for other existing equipment.

- K. Accessories: Ten (10) working days before completion of the elevator, provide all special tools necessary for making all system adjustments to the signal and speed controller and door equipment. Deliver to Architect before acceptance test and inspection of the elevator.
- L. Redundant Parts: Provide the following redundant equipment/parts, identical to those incorporated into the required work of this Contract. Deliver redundant parts to the Architect's representative prior to final acceptance of the elevator before its return to normal service.
  - One (1) complete set of each type circuit board used in the controller. Ship boards in containers which are thoroughly protected against damage to contents by water, x-ray, magnetic and/or physical or static shock. Clearly mark or identify each container as to contents and method of handling to minimize damage due to handling and storage. Install each set in an active elevator and demonstrate to the Architect that each board is functional. The "Mother Board" is not considered one of the boards to be supplied.
  - 2. One (1) complete set of each type of vandal-proof button assembly.
  - 3. Two (2) sets of each type of relay used.
  - 4. One (1) contactor of each type used.
  - 5. Two (2) sets of car rollers and 2 sets of counterweight rollers of each type used.
  - 6. One (1) set of each type electronic signage
  - 7. Two (2) complete sets of each size fuses used taking special note of the required voltage rating.
- M. Safety Plan: Within twenty (20) working days of "Award of Contract", provide a Safety Plan meeting OSHA and AOC safety Guidelines for work in hazardous environments (areas where high voltage and large moving equipment are found). Plan shall define number of individuals on the job site(s), their training, typical safety equipment to be used, and procedures for addressing typical hazardous conditions. Submit for review and approval.
- N. Schedule of work: Provide as described in Division 1 section "General Requirements" of this Project Manual. Schedule shall be in the form of a Gantt "Bar" chart showing the projected beginning and end with there associated date of each segment of the elevator modernization following the phasing described in "Sequencing and Scheduling" article of this Section.
- O. Schedule of Values: Provide as described in Division 1 section "General Requirements" of this Project Manual.
- P. Heat Release: Provide total equipment BTU output of the controller, SCR drive, isolation transformer, choke coil and the hoist machine under full load conditions at an average of 120 starts per hour.

### 1.5 QUALITY ASSURANCE:

- A. Installer Qualifications: Either the elevator manufacturer or a licensee of the manufacturer shall qualify as a "Specialist" under the provisions of Division 1, GENERAL REQUIREMENTS.
  - Welder Qualifications: The Contractor shall qualify welding processes and welding operators in accordance with AWS "Standard Qualification Procedure" and provide a current certification that welders employed in work specified have satisfactorily passed AWS qualification tests.

- a. All welding shall be done by a certified welder. A copy of the welder's certification shall be a part of the submittal process.
- b. Field welding in any portion of installation will not be permitted without prior approval of the Architect. Random torching and welding of structural members shall not be permitted.
- B. Standard Systems and Components: Duplicate equipment, components, and devices shall have all parts which perform the same function manufactured to one design for each part, and each part shall be interchangeable with other like parts.

## 1.6 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver material in manufacturer's original, unopened protective packaging. Make deliveries to "Superintendent U.S. Capitol, Washington, D.C., 20515." (\*\*The following procedure may be superceded by instructions provided by the AOC Procurement Division / U.S. Capitol Police instructions provided with Invitations for Bid are most current and take precedence.)
  - All deliveries must be inspected off site and placed under Capitol Police seal. The location of the inspection facility is: corner of Half St. and P St., S.E., Washington, D.C.; contact phone number is: 202-226-0905.
  - 2. All Contractors are to supply to the Architect, a minimum of 2 working days in advance of delivery, the following information:
    - a. Driver's name, driver's license number with State, and Social Security Number.
    - b. Vehicle description(s), make, model, year, color and license numbers with State.
- B. Store material in original protective packaging. Prevent soiling, physical damage, and wetting. Protect equipment and exposed finishes during transportation, erection, and construction against damage and stains.
- C. Limitation on the Use of the Site: Portions of the building beyond the areas on which the specified work is indicated shall not be disturbed. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.

## 1.7 SEQUENCING AND SCHEDULING:

- A. Work Schedule: Work on the elevator to be modernized shall not start until the Initial Notice to Proceed (NTP) is issued. The NTP will be issued to begin the typical approval process; the contractor should proceed with equipment orders at that time. Equipment and accessories shall be stockpiled so when work begins it continues uninterrupted until the renovation of the elevator is complete. After the stockpiling is finished and receipt of all materials are verified, a second NTP will be issued to allow demolition and renovation work to proceed. All work on this project including inspection and the resolution of all major items shall be completed by Aug.31, 2008.
- B. Standard Working Hours: The standard working hours of operation are:
  - 1. Monday through Saturday: 6 AM to 2:30 PM.

- C. Off-Hours Work: It is expected that the Contractor will need to work at times outside the standard working hours. Include the off hour work in the schedule, per Division 1 section General Requirements. Include duration, location of work, and the number of persons involved in work outside of standard hours.
  - Contractor is required to accomplish all work that is noisy, and produces odors, smoke
    or other nuisances after standard working hours.
- D. Access to Work Area: Access to the building, work areas, and laydown areas will be designated by the Capitol Superintendent or his representative.

#### 1.8 WARRANTY:

- A. Special Project Warranty: Provide special project warranty, signed by the Contractor, Installer, and Manufacturer, agreeing to replace, repair, or restore defective materials and workmanship of elevator work during warranty period. This warranty shall be in addition to, and not a limitation of, other rights the Government may have against the Contractor under the Contract Documents.
  - "Defective" is defined to include, but not by way of limitation, operation or control
    system failures, performances below specified ratings, excessive wear, unusual
    deterioration or aging of materials or finishes, unsafe conditions, the need for
    excessive maintenance, abnormal noise or vibration, and similar unusual, unexpected,
    and unsatisfactory conditions.
  - 2. General Warranty period is 1 year effective on the date of Final Acceptance of each elevator.
  - Warranty period for the Simplex Controller will go into effect on the date of Final
    Acceptance of the elevator controlled by that controller and be in effect for fifteen (15)
    months from that date.
  - 4. Provide 24-hour emergency call-back services for specified elevator equipment, per the paragraph below.
- B. Warranties: Provide coincidental product warranties where available for major components of elevator work. Submit with maintenance manuals.
- C. Communications: The Contractor shall maintain an attended telephonic help-line which shall be available 24 hours a day, including weekends and holidays, for receipt of calls (e.g., emergency repairs) from the Foreman or Assistant Foreman of the Elevator Shop; the Jurisidicational Superintendent, his Deputy, or an employee of the Elevator Engineering Division. The Contractor shall provide the telephone number and name of the contact person prior to the start of the warranty period. This requirement shall be in effect during the entire warranty period.
  - The Contractor shall acknowledge and be on-site within a two (2) hour period of receipt of a call between 5:00 a.m. to 10:00 p.m., Monday through Saturday. Calls received by the Contractor outside of this time frame requires him to acknowledge and be on-site within an eight (8) hours of its receipt.

# 1.9 COMMUNICATIONS AND CHECK-IN:

- A. The Contractor shall deliver to the AOC a local phone number which is monitored 24 hours a day, seven (7) days a week. See the communication paragraph under par. 1.8 WARRANTY, for more information.
- B. The Contractor, upon entering the jurisdiction for any Contract related reason, shall proceed immediately to the elevator shop and sign in on a log book provided by the shop and while in the presence of the Foreman or his designee. At this time the AOC representative can inform the Contractor of any jurisdictional or job related information (ex: Building shut down because of a pending visit by high ranking personages) that could effect the Contractor's work that day or in the near future.
- C. The Contractor, upon finishing work for the day within the jurisdiction, shall proceed immediately to the elevator shop and sign out on a log book provided by the shop and while in the presence of the Foreman or his designee.

### **PART 2 - PRODUCTS**

#### 2.1 MATERIALS AND COMPONENTS

- A. Steel: Unless specified otherwise provide steel of a 14 gage minimum thickness.
  - Sheet Steel (Furniture Steel for Exposed Work): Stretcher-leveled, cold-rolled, commercial-quality carbon steel, complying with ASTM A366, matte finish. Surfaces shall receive cleaning, rust preventative treatment and where specified a baked enamel finish.
  - 2. Sheet Steel (for Unexposed Work): Hot-rolled, commercial-quality carbon steel, pickled and oiled, complying with ASTM A569.
  - 3. Structural Steel Shapes and Plates: ASTM A6, ASTM A36, and ASTM A108.
  - 4. Enameled Steel Panels: Flush hollow-metal construction, fabricated from ASTM A 366 (ASTM A 366M) cold-rolled steel, commercial quality, Class 1, matte finish, stretcher leveled. Factory finish all exposed sheet steel surfaces, clean and then provide a rust preventative treatment by bonderizing or other equally serviceable approved process. Sheet steel work exposed on car interior shall receive a six-coat baked enamel finish consisting of three coats of primers and surfacing material and three coats of enamel. Each coat shall be evenly applied in sufficient quantity to completely cover the preceding coat, baked at proper temperature and then rubbed smooth. The final coat shall be rubbed to an eggshell gloss.
- B. Satin Stainless Steel: ASTM A 167, Type 302 or 304, with No. 4 satin finish.
- C. Aluminum: Extrusions per ASTM B221; sheet and plate per ASTM B209. Aluminum work shall have a uniform fine satin finish (180-220 emery) on exposed plain surfaces and shall be anodized in natural color.
- D. Extruded Nickel Silver: Extruded-nickel silver, ASTM B 151 (ASTM B 151M), alloy UNS No. C74500, with grooved surface, 1/4 inch (6.4 mm) thickness, polished finish.

- E. Fire-Retardant Treated Plywood or Particle-Board Panels: Minimum 3/4" thick backup for natural finished wood, and plastic laminate veneered panels, edged and faced as shown, provided with suitable anti-warp backing; meet ASTM E84 Class "I" rating with a flame-spread rating of 25 or less, registered with Local Authorities for elevator finish materials.
- F. Paint Materials: Coat ferrous metals with the following paint materials. Note, materials may be provided by any one of the manufacturers listed below, however, all materials selected shall be from the same manufacture to ensure system compatibility.
  - Primer: Quick-drying, rust-inhibitive, alkyd-based or epoxy-metal primer, as recommended by the manufacturer for this substrate, applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.5 mils (0.038 mm).

a. Devoe: 13101 Mirrolac Rust Penetrating Metal Primer.
 b. Fuller: 621-04 Blox-Rust Alkyd & Structural Metal Primer.
 c. Glidden: 5207 Glid-Guard Tank & Structural Primer, White.

d. Approved equals.

Undercoat: Alkyd, interior enamel undercoat or full-gloss, interior, alkyd-enamel
finish coat, as recommended by the manufacturer for this substrate, applied at
spreading rate recommended by the manufacturer to achieve a total dry film thickness
of not less than 1.2 mils (0.031 mm).

a. Devoe: 70XX Mirrolac Interior/Exterior Alkyd-Urethane Gloss

Enamel.

b. Fuller: 220-07 Interior Alkyd Enamel Undercoat.

c. Glidden: 4500 Series Glid-Guard Alkyd Industrial Enamel.

d. Approved equals

 Finish Coat: Full-gloss, alkyd, interior enamel applied at spreading rate recommended by the manufacturer to achieve a total dry film thickness of not less than 1.2 mils (0.031 mm).

a. Devoe: 70XX Mirrolac Interior/Exterior Alkyd-Urethane Gloss

Enamel.

b. Fuller: 312-XX EPA Compliant Heavy-Duty Enamel.c. Glidden: 4500 Series Glid-Guard Alkyd Industrial Enamel.

d. Approved equals.

G. Conduit: Unless otherwise specified or approved, all electrical conductors, except traveling cable connections to the car, shall be installed in rigid zinc-coated steel or aluminum conduit, electrical metallic tubing or metal wireways. All raceways completely embedded in concrete slabs, walls, and floor fills shall be rigid steel conduits. No rigid conduit shall be smaller than 3/4-inch electrical trade size. Where permitted by NEC, ½-inch trade size conduits and EMT may be used only for tap connections, not exceeding 18 inches in length, to interlocks, emergency exits and leveling units. Self-supporting connections, where approved, shall be fully protected from abrasion, or other mechanical injury. Existing raceways in the elevator

machine rooms and hoistways may be reused if code conforming. Each conduit run or duct shall contain 10% spare wires and, in any event, not less than one spare wire.

- Flexible Conduit: Connect motors and other components subject to movement or
  vibration, to the conduit or EMT systems with flexible conduit. Permitted flexible
  metal conduit shall contain a green-coded equipment grounding conductor. Flexible
  heavy-duty service cord, Type SO, may be used between fixed car wiring and car door
  switches for infra-red screen detectors. Electrical connections to machinery shall
  allow one foot of lateral motion.
- 2. Machine Room: All conduit connecting the various items of elevator equipment in the elevator machine room shall be run in concealed positions insofar as practicable. An auxiliary gutter may be used between, starter, and similar apparatus in the elevator machine room. Metal wireways and auxiliary gutters shall be run exposed in readily accessible locations. Such wireways or gutters shall be routed in a manner which does not infringe upon minimum vertical or horizontal clearances imposed by applicable Codes and which does not impede the utilization of existing trolley-hoist systems to move equipment or components from the machine rooms to the existing trap doors.
- 3. Fittings: Raceway terminal fittings must provide conductor passageways free from burrs, shoulders or other projections which will reduce internal passage area or cause abrasion of conductors being pulled through. All conduit terminating in steel cabinets, junction boxes, wireways switch boxes, outlet boxes and similar locations shall have approved insulation bushings. If the bushings are constructed completely of insulation material, a steel locknut shall be installed under the bushing. At ends of conduits not terminating in steel cabinets or boxes, the conductor shall be protected by terminal fittings having an insulated opening for the conductors. Couplings and connectors for EMT shall be made either of steel or malleable iron only, shall be "concrete tight" or "rain tight" and shall be either the gland and ring compression type, or the stainless steel multiple point locking type. All connectors shall have insulated throats. Conduit and EMT fittings and connections using set screws or indentations as a means of attachment shall not be used.
- 4. Standards for Conduits and fittings: Provide in conformance with the following Federal Specifications:

a. Conduit, steel, rigid, zinc-coated: WW

WW-C-581.

b. Conduit, aluminum, rigid:

WW-C-00540.

c. Conduit, flexible (watertight):

WW-C 566C(1)

d. Fittings, rigid conduit:

W-F-408D except materials shall be

either iron or steel only.

e. Fittings, cable and conduit:

W-F-406.

H. Electric Wiring: Provide in compliance with NEC requirements all wires and cables necessary for the proper connection and operation of all equipment installed under the elevator contract. All interconnected devices shall be compatible. Provide new elevator fixed wiring and traveling cable. Existing conduit, wire duct and fillings may be reused provided they meet current requirements of N.E.C. Terminal connections for all conductors at equipment panels, hoistway and on elevator car shall be made on terminal blocks or studs having identifying numbers. Make all conductor connections with terminal eyelets of the solderless type.

- 1. Conductors and Cables: Provide circuit conductors, exclusive of traveling cables, of solid annealed or stranded copper with 600-volts, 75 deg. C or higher-rated type THWN insulation, except as otherwise approved. Code individual wires and all connections on identified studs connections in any wiring except at terminal blocks, control cabinets, junction boxes or conduits. Provide solderless wire connectors (cable lugs) conforming to FS W-S-601 for conductors used for external wiring, except that conductors No. 10 and smaller may be made with approved terminal eyelets fixed on conductor by special tool or with approved pressure-type terminal blocks. Unless otherwise specified, no joints or splices will be permitted in wiring except at outlets.
  - a. Single and multiple conductor cables shall have a color coding or other suitable identification for each conductor.
  - b. Terminal connections for all conductors, used for external wiring between the various items of elevator equipment, shall be solderless pressure wire connectors, in accordance with Federal Specification W-S-610D(1) or UL Standard No. 486.A-80 Connections for wire size No. 10 or smaller shall be of the crimp type applied with an appropriate setting tool. Terminal blocks having pressure wire connectors of the clamp type that meet UL 1059-88 requirements for stranded wire may be used in lieu of terminal eyelet connections. Terminal blocks using pierce-through serrated washers will not be acceptable.
- Grounding: All wiring shall test free from short circuit or grounds. The insulation
  resistance between external conductors, and between conductors and ground, shall not
  be less than one megohm. Provide grounding and bonding in accordance with the
  NEC.
- 3. Circuit Lists: Attach waterproof, neat and legible lists, showing wiring runs, color codes and number codes to the controller.
- 4. Entrance Wiring: The interlock wiring of all elevator entrances shall conform to the requirements of the A17.1 Code. Termination in the interlock box shall be sleeved with an fire-resistive eyelet or other approved type jacket.

### I. Switches & Outlets:

- Power Outlet: Provide heavy duty, NEMA designation 5-20R, grounded, 125-volt rated, 20A, duplex outlets. Comply with UL 498 and NEMA WD 1. Provide metal screws for securing wall plates.
  - a. In cabs: As an integral component of the front return panel specified elsewhere in this section. Match return panel material and finish.
  - b. In the elevator pit: Installed at a minimum height of four (4) feet off of pit floor. Outlets shall have hinged outlet covers. Wall plates shall be galvanized steel plate. Provide GFI type. The Government will provide a source of power. Coordinate with the Architect.
  - In car top control stations: Installed in an accessible location which would not restrict movement on top of cab. Outlets shall have hinged outlet covers.
     Provide GFI type. Wall plates shall be galvanized steel plate.
- Light Switch: Provide heavy duty, 120/277 volt-rated, 20A, single pole, two position toggle switch. Provide galvanized or stainless steel wall plates. Locate light switches as follows:

- a. In cabs: As an integral component of the control panel installed behind the locked panel.
- 3. Lamps: On the top and bottom of the car, provide lamp sockets and rough-service type lamps fitted with wire lamp guards with integral switch. Locate the sockets in accessible locations which do not restrict movement on the top of the car.
- J. Traveling cables: Provide new flexible traveling elevator cables, conforming with the requirements of NEC Article 620. Provide color coded identification each conductor within the traveling cable. New traveling cables shall have a flame-retarding and moisture-resistive outer covering. At a minimum, suitably support the traveling cable at the midpoint of the hoistway by a wire rope steel core to relieve strains in the individual conductors.
  - Conduits: At the car end of each traveling cable, run the traveling cable in conduit or
    wire duct from underneath the car platform to the car operating panels or top of the car
    junction boxes. At the machine room end of each traveling cable, run the traveling
    cable in conduit from the hoistway junction box to the control equipment cabinets.
    Run traveling cable in conduit for horizontal runs in the hoistway.
  - 2. Communication Spares: Provide a minimum of ten (10) pairs of twisted shielded conductors for future systems.
  - 3. Controller Spares: Provide twenty (20) percent or ten (10) pairs, whichever is greater, spare wires between the controller, microprocessor and encoder selector, car wiring and supervisory control panel in all traveling cable.
  - 4. Labeling: All conductors, including spares, in traveling cables shall be tag coded at their terminals in the machine room, the elevator car junction box, stations within the cab, and the supervisory control panel.
  - 5. Protection: Provide suitable shields or pads wherever necessary to prevent chafing or damage to traveling cables from hoistway construction.
- K. Safety Switches: Reuse the safety switch for the car lighting circuit. Provide and fasten a sign to the switch identifying the supply side overcurrent device.
- L. Circuit Breakers: Remove the existing disconnect switch. Provide a circuit breaker with a 120 V shunt trip comparable to the existing or complying with the following: UL 489, "Molded Case Circuit Breakers and Circuit Breaker Enclosures," and NEMA AB1, "Molded Case Circuit Breakers."
  - 1. Shall be plastic molded case, completely sealed enclosure with toggle type operating handle. Trip ampere rating and ON/OFF indication shall be clearly visible.
  - Thermal-magnetic type trip-free, trip-indicating, quick-make, quick-break, with inverse time delay characteristics. Single-handle and common tripping multi-pole breakers.
  - 3. Silver alloy contacts with auxiliary arc-quenching devices.
  - Interrupting capacity shall be as follows:
    - a. Devices used on 480/277 systems not less than 14,000 AIC, minimum frame size 100 amperes.

- 5. Bolted type terminals UL listed for either aluminum or copper 90 deg C cables.
- 6. Plug-on molded circuit breakers are not acceptable.
- 7. Identification: Engraved, Plastic-Laminated Labels, Signs, and Instruction Plates: Engraving stock melamine plastic laminate, 1/16-inch minimum thick for signs up to 20 square inches, or 8 inches in length; 1/8-inch thick for larger sizes. Engraved legend in white letters on black face and punched for rivets. Install plates with rivets
- 8. Enclosure and Lugs: NEMA AB 1, and indication when the breaker is in "On" position and can be positively padlocked in "Off" positions. Lugs must be UL listed for aluminum and/or copper conductors and be front removable.
- 9. Mounting: Mount enclosure rigidly and with proper alignment on building structure or steel supports with centerline of operating handle not more than 6 feet above finished floor unless otherwise required. Use steel supports fabricated from standard rolled structural steel shapes or framing channel to provide one-inch separation between enclosure and building wall for vertical flow of air.
  - a. Provide connections and wiring to and from each circuit breaker. Support conduit feeder from ceiling or floor.
  - b. Circuit breakers shall be mounted on adjacent wall or from the floor with independent supports, level and plumb.
  - c. Close unused openings in the enclosure with approved covers.
- M. Auto-body filler: For steel frames scheduled to be retained, provide 2-component epoxy automobile filler, as required to fill and then sand smooth dents and indentations present on entrance frames that cannot be removed by normal sanding. Follow manufacturer's recommendations for cleaning of surfaces prior to installation and for application procedures.
- N. Elevator Signs: Warning Signs (In case of fire use stairs) shall be installed above or as part of each hall call button station and on main/auxiliary car operating panel.
  - 1. Materials: Signs 1/8 inch thick non-glare optically correct acrylic.
  - Colors: black with white lettering. Framing for individual signs that are not part of the faceplates shall be of the same material and have the same finish as the other car and corridor faceplates respectively.
  - 3. Pictographs: Provide elevator corridor call button pictograph signs, refer to Appendix 'H', A17.I Elevator Code. Submit samples. This sign may be modified to include the wording "NO SMOKING" and be used in place of both the warning and no smoking and elevator corridor call button pictograph signs.
- Trademarks: Do not display manufacturers name or trademark on exposed surfaces of new materials or components.

#### 2.2 CONTROLLERS AND SELECTORS:

A. General: Provide solid state control equipment, in manufacturer's standard NEMA 1 enclosure, designed to control starting and stopping, to prevent damage to motor from overload or excess current, and to automatically disconnect power supply, apply brake and bring car to rest in event of power failure or upon activation of safety device. Controller's failure modes shall prevent power from being applied to drive machine in event of phase reversal, single phase, phase failure, or low voltage which would result in elevator

malfunction. The iController shall be as manufactured by MCE (Motion Control Engineering), 11380 White Rock Road Rancho Cordova, CA 95742, 1-800-444-7442.

- 1. Frame: Securely mount all assemblies, power supplies, chassis switches, relays and other items on a substantial, self-supporting steel frame.
- 2. Switch and Relay Design: Provide where required, direct-current type, magnet operated with contacts of design and material to insure maximum conductivity, long life and reliable operation without overheating or excessive wear, and provide a wiping action to prevent sticking due to fusion. Provide switches carrying highly inductive currents with arc deflectors or suppressors.
- 3. Microprocessor-Related Hardware: Provide printed circuit boards with FR4 or G10 glass epoxy material with a minimum equivalent one-ounce copper. Isolate inputs from external devices (such as push buttons) with opto-isolation modules. Provide separate regulated power supply for each computer chassis. Provide control circuits so that one side of power supply is grounded for testing purposes. Provide the capability for the system to restart when power is restored in the event of a power failure or interruption. Provide system memory so that data is retained in the event of power failure or disturbance.
  - a. Noise: The building contains many computer systems, including computer terminals, mini-computer systems, and personal computers. Provide built-in noise suppression devices which provide a high level of noise immunity on double-sided printed circuit boards and on all solid-state hardware, power supplies, and devices. The controllers shall not introduce voltage transients or constant noise components which exceed 250 millivolts at any frequency between 1,000 and 10,000 Hz to the building distribution system. The Contractor shall provide all necessary additional equipment including, but not limited to: filters, inductors, and isolation transformers, which are required to satisfy these requirements at no additional cost to the Government. After installation of each controller, noise measurements will be made by the Architect at various points determined by the Architect.
- 4. Power Supplies: Provide tested and labeled short-circuit protection.
- Wiring: Provide copper wires for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to studs or terminals.
- Marking: Permanently mark components (relays, fuses, PC board, etc.) with symbols indicated on approved shop drawings.
- 7. Extender Boards: Provide extender boards when computing devices are used inside a computer chassis to facilitate access to the printed circuit cards utilized.
- 8. Time Base: Provide stable capacitor or crystals as the time base for electronic time-delay devices.
- B. Automatic Operation Systems: Provide micro-computer based control system for each elevator, as required, to provide automatic operation of type indicated, and defined in the Code as "Operations." Include all hardware required to connect, transfer and interrupt power, and protect the motor against overloading. The system shall also perform car operational control.

 Single Elevator - Passenger: Provide "Selective-Collective Automatic Operation" as defined in ASME A17.1

#### C. Control Features:

- 1. Motion Control: Provide a microprocessor based closed loop feedback control which continually maintains an ideal speed curve. Base speed curve on minimum acceleration/ deceleration rate of 3 feet per second cubed, and incorporate analog signal feedback reference pattern with digital car position count so that an ideal speed curve is exactly duplicated regardless of car load, machine room temperature, or hoist rope stretch. Provide smooth, comfortable acceleration, retardation and dynamic braking and limit difference in speed between full load and no load to not more than +/- 5% of contract speed.
  - a. Horizontal Acceleration within Cars during All Riding and Door Operating Conditions: Not more than 15 mg in the 1 10 Hz range.
  - b. Acceleration and Deceleration: Constant and not more than 5 feet/second/second with an initial ramp between 0.5 and 0.75 second.
  - c. Sustained Jerk: Not more than 8 feet/second cubed.
  - d. Automatic Leveling: Stop car within 1/8" above or below the landing sill. Avoid overtravel, as well as undertravel, and maintain stopping accuracy regardless of load in car, direction of travel, rope slippage or stretch.
- 2. Door Operation: Automatically open door when car arrives at main landing whether car call has been registered or not.
- 3. Traffic Monitoring: Provide operation and control compatible with Architect's Monitoring System that permits modification of the elevator operation to accommodate special traffic requirements. Building programmable functions shall include, but are not limited to, the following:
  - a. Monitoring traffic and car operation with histogram of waiting times.
  - b. Designation and activation of priority floors, security floors, second home floor for dual or alternate home floor operation.
  - c. Activation of up peak, down peak.
  - d. Initiation of independent services (Fireman's, "Senators Only," freight, etc.)
  - e. Dispatch Protection: Backup dispatching in the event primary dispatcher fails.
  - f. Position Sensing: Reset at each floor when stop made, and at no less than 150 intervals in express zones.
- 4. Computer Voice System. Provide a computer voice annunciation system. The system shall utilize solid state digitally encoded speech. Compose and submit for approval appropriate voice announcements customized for this feature. Provide a single compact unit in each car or in the machine room. Announcements shall be made as the doors open or on reversal of direction. Announcements shall be repeated at the programmed rate and the programmed number of times. In addition, provide a door obstruction message and fire emergency messages for the designated floor. Provide separate independent volume controls for messages which should be heard by passengers in the lobbies. Provide internal, field programmable timers and solid state devices with field programmable vocabulary. The power output of the unit(s) shall be 20 watts into a 4

ohm speaker. The Government may choose to measure the power at the terminals of the speaker. Provide power amplifiers which can deliver the specified power into the speaker at the end of a 300 foot circuit. Provide equipment with the following listed minimum vocabulary:

first floor second floor
third floor basement floor
going up going down
please stand clear of the closing door
Independent Inspection
Out of Service

This elevator is on fire recall please exit the elevator in a safe and orderly manner

- D. Micro-Processor System: Use readily-reprogrammable system software. Design basic algorithm to optimize service based on equalizing system's response to registered hall calls at shortest possible level and equalizing trip time at shortest possible level. The program shall be read and understood through the use of a data link to the MS/WINDOWS compatible dispatch computer, which will be part of the controller package. The program(s) shall keep a history of all recent events with which the controller is involved. The events include normal functions (use of elevators, availability, etc.), failures, personnel access and their actions.
  - Diagnostic Capabilities: Provide diagnostic feature capable of determining all faults. This diagnostic feature shall use the network to constantly monitor the status of all cars via a communication link. Every changing condition of each elevator shall be analyzed against its normal mode of operation. When a fault is detected, the location of the elevator, the time of day; and the number of times said fault has occurred, along with the fault code message, shall be stored in a non-volatile memory. The system shall support user retrieval of the fault information of every car and its display on the video screen in the machine room.
    - a. Diagnostic devices shall not incorporate timed delay program deletions or file purges. No program shall eliminate data without command from authorized government personnel.
  - 2. System Security: The system shall provide multiple higher levels (e.g. password) of security than the key switch lockout. Security functions shall be integrated with control dispatching and management of the elevators. System security equipment provided shall allow the securing of floors via the system and monitoring of the security status of the elevators on CRT screen at a security monitoring station alerting the security personnel to any unauthorized stops.
  - 3. Local/Remote Diagnostics: Provide a means to attach a laptop, portable, MS/WINDOWS (latest version) based, computer via com port and cable connector located on reachable area of the inside surface of the controller and/or group controller. The attachment shall allow a mechanic to interrogate the controller as the current and past faults and current conditions as related to the elevator or group. This connection and communication shall be capable without removing or replacing communication to the other listed remote sites.

- E. Independent Service: Provide a 2-position key-operated switch in the main car operating panel. Label the switch "INDEPENDENT SERVICE." Label "ON" and "OFF" functions. Operations shall comply with Code.
- F. Inspection Service: Provide switch in car panel to permit operation of elevator from on top of car; or top and bottom access switches, for inspection purposes, with car and hall buttons inoperative. Provide an operating fixture on top of car, mounted on or from car crosshead, containing constant pressure "UP" and "DOWN" buttons for operating elevator, an emergency stop button and a toggle switch which makes top-of-car inspection devices operative.
- G. Fire Fighters' Service: Provide as per Code (Phase I and II), to operate and recall elevators to the designated floor or the alternate floor in fire or other emergency condition. Provide sensor signal wiring from hoistway or machine room connection point to controller terminals. Provide similar operation and fixtures on all elevators. Operate visual/audible signal until return is complete or automatic operation restored.
  - 1. Phase I and Phase II Modes: Provide for both manual and automatic "Fire Fighter's Service." Provide a key for the elevator, enclosed in a master-keyed, hinged, covered, recessed break glass, compartment, to activate Phase I Emergency Recall Operation. Provide a cabinet where the hammer is included and secured to the inside of the cabinet by a chain. Inscribe cover of compartment with phrase "Fire Fighter's Service." Provide lock master-keyed to match District of Columbia Police and Fire Departments' Call Box Key. Mount the compartment as directed by the Architect on the main and alternate floors. The fire service key shall remain in the lock box.
    - a. Locate manual recall switches at both the designated floor and the alternate floor listed. A three position Phase I key switch ("ON," "OFF" and "BY-PASS) for each elevator or group of elevators shall be incorporated into the hall call station at the designated fire return floor. A two position key switch ("ON," "OFF") shall be incorporated into the hall call station at the alternate fire return floor. Provide custom cast panels of a finish matching existing hall station panels, face plate for key box and fireman's direction panel. Key box face plate and fireman's direction panel shall be a single panel.
    - Provide terminal contacts, properly labeled, in accordance with requirements of NFPA Standard No.72 E, for future connection of smoke detectors to be provided by others.
    - c. Instructions: Provide instructions for operation of the elevators under Phase I conditions as part of Phase I key operated switch at designated and alternate floors. Instructions for operation of elevators under Phase II conditions shall be engraved in to each operating panel in each car. Print instructions in letters not less than 1/8" high.

#### 2. Recall Floors:

Designated Floor: Refer to the Elev

Refer to the Elevator Schedule at the end of this section.

b. Alternate Floor: Refer to the Elevator Schedule at the end of this section.

- H. Encoder/Selector Associated Equipment: Except as otherwise indicated, provide new manufacturer's standard pre-engineered elevator encoder/selector system which shall be compatible with the controller and other related equipment.
- I. Communications Systems: Provide telephonic communication wiring for emergency and firefighter's telephones from the cab/car top units through the controller and group controller.
- J. Attendant Service: An attendant service switch shall be provided to initiate the following operations: When the car is stopped at a landing, the doors shall open automatically and shall remain open until closed by the attendant. The doors shall be closed by constant pressure on any one of the following controls: the door close button, a car call button, car switch or the up or down attendant direction buttons. The car shall receive hall calls as they are normally assigned by the controller logic system, but response shall be determined by the attendant. A momentary buzzer shall sound, and the attendant direction lights shall indicate whether the call originated above or below the car. A bypass button shall be provided to override hall calls, permitting the attendant to proceed nonstop to a selected call. In case of fire service operation, the attendant shall be notified by the audio-visual fire warning indicator. Illuminate the "Senators Only" message when attendant service is activated. Include individual "UP" and "DOWN" colored, LED indicators to display hall calls for guiding the elevator operator while on Attendant Service.

## 2.3 MOTOR CONTROL:

- A. General: This system shall provide for maximum "car start to car stop" time for a typical one floor run with a balanced load at the midpoint of the hoistway as tabulated. A maximum of 0.8 seconds will be allowed from door close to car start. The performance times shall be maintained without "hunting" at the floor levels. Prior to termination of the adjustment period, the elevators shall be readjusted, as required, to meet these performance requirements within 10 percent.
  - Voltage Tolerances: The equipment shall be designed to operate at plus or minus 10% of normal feeder voltage and plus or minus 3% of feeder frequency without damage or interruption of elevator service. Protective devices shall be included to prevent damage on over or under voltage.
  - Isolation of Components: Isolate the inputs from external devices (such as hall buttons) and isolate the outputs to external devices (such as indicators) by means of relays or optical devices. Provide for separate regulated power supplies to serve each microprocessor system.
  - Performance Requirements: Overspeed governor switch shall operate in the "up" and "down" direction of travel. The speed shall be maintained within (5%) percent of contract speed.
  - 4. Match drives to the existing hoist motor and electrical feeder capabilities.
- B. Motor Drive (Silicon Controlled Rectifier): Except as otherwise indicated, where variable voltage is required, provide manufacturer's standard solid-state power converters, for use with motors on elevator machines. The motor drive unit shall be especially designed for elevator service and must comply with A17.1 Code Rule 210.10. At no time shall the motor

be used in a plugged mode, nor shall load absorbing ballast resistors be used except for emergency stopping as a result of line loss.

- Filters and Chokes: Provide sufficient line filters or chokes to prevent electrical peaks
  or spikes from being fed back into building power system from solid-state converters.
  - a. The legislative call electronic signal system in the building consists of a power-line carrier current system. The purpose of the power-line carrier current system is to transmit signals by timing and duration of high frequency pulses. The high frequency pulses are superimposed upon the building power distribution system. The signal frequencies for the Senate Clocks are centered around 2633, 3510, 4200, and 8775 hertz and have a bandwidth of 200 hertz. The receivers are powered at 120 volts. Neither shall the variable speed motor controllers have an effect on the legislative call electronic signal system, nor shall the variable speed motor controllers be affected by that signal. Further, the variable speed controllers shall not act as a signal ground causing the legislative call system to be non-reactive. The median amplitude of the legislative call electronic signal throughout the power distribution system is 1.5 volts.
  - b. The building contains a large population of computer systems, including computer terminals, mini-computer systems, and personal computers. The variable speed motor controllers shall introduce no voltage transients or constant noise components which exceed 250 millivolts at any frequency between 1,000 and 10,000 hertz to the building distribution system.
  - c. The Contractor shall submit suitable calculations to indicate that the controllers will be compatible with the systems listed and comply with the performance requirements specified above. If the controllers do not meet these requirements, the Contractor shall provide all necessary additional equipment including, but not limited to, filters, inductors or isolation transformers, which are required to satisfy these requirements at no additional cost to the Government.
  - d. Following installation of each of the controllers, measurements will be made by the Government at the point of common coupling to the building power distribution system. Several measurements will be made with all variable speed motor controllers in operation at various output frequencies to verify compliance with the performance requirements specified.
- 2. A voltage control system which utilizes direct current voltage obtained from a four (4) quadrant, twelve (12) SCR, full wave regenerative silicon controlled rectifier drive shall be provided. The silicon controlled rectifiers shall be provided with means for proper heat dissipation, switching arrangements to permit the passage of regenerated power and a smoothing reactance to eliminate completely mechanical vibrations and structure borne sound from ripple voltage transients.
- 3. Suitable switches shall be provided to control the units from the machine room and (where specified under method of operation) from the car. The switches shall be arranged so that the motor drive unit may be energized or de-energized from the car and Firefighters' Service Panel.
- During the re-leveling, sudden application of full output from a solid state control
  amplifier shall not cause the car to move more than nine inches from the floor level in
  either direction of travel.
- 5. Verify that existing feeders will meet the requirements of the new SCR drive.
- 6. Transformers shall be grounded according to NEC code.

#### 2.4 HOIST MACHINE:

- A. General: The Contractor shall take all measurements, perform calculations, and determine requirements for the hoist motors to insure that all new work of the contract is compatible with the hoist machine.
- B. Refurbish Traction Hoist Machine(s). The work shall include, but not be limited to, the following:
  - Complete replacement of all bearings. Seal all lubrication leaks, flush all lubrication reservoirs and add new lubrication that meets original manufacturers specification or meets existing upgraded standards for this machine.
  - 2. Replace all brake shoes with asbestos-free linings.
  - 3. Megger test to be performed on the machine. Maintain a minimum voltage of 500 V for at least 1 minute. Include readings for the series fields, shunt fields and interpoles. Forward the test promptly to the Architect of the Capitol for the record. Any replacement parts used shall be supported by copies of invoices from a recognized supplier of original replacement parts. Submit the name of the intended supplier for approval.
  - 4. Thoroughly clean and paint the machines.
  - 5. Replace any missing, damaged bolts, nuts and washers.

# 2.5 MACHINE ROOM, SPACE EQUIPMENT:

- A. General: The existing machine room will be reused.
- B. Machine Beams and Other Support Steel: Existing elevator machine beams, sheave beams, dead end beams, and rope fastening plates shall be reused. All beam anchorings shall be examined and made secure. All fastenings shall be examined and made secure. If additional support beams are required, Contractor shall notify the Architect in a timely manner in writing stating all facts and recommendations.
- C. Governor: Provide new centrifugal type governor and tension sheaves, conforming to Code. Mount over the hoistway and connect to the car safety tripping mechanism by means of a wire rope. The governor rope shall pass over the governor sheave and under the weighted-tension sheave in the pit.
  - Jaw Design: The governor jaws shall grip the cable with a minimum delay after the
    governor reaches its tripping speed and shall be held in engagement with the cable by
    springs and the tension of the governor cable. Design governor jaws so that the
    governor cable may slide through them after the safety has set without damage to the
    cable.
  - Adjustment: Accurately adjust the governor to operate within limits specified by the Code. All adjustable parts shall be sealed.
  - 3. Switches: The operation of the governor on overspeed shall open a switch disconnecting the power to the elevator before a safety mechanism has tripped. A second switch shall be provided to remove power to the elevator.
  - 4. Marking Plate: Provide a metal marking plate securely fastened to the governor and marked with governor tripping speed, rope size and construction.
  - 5. Tension Sheave: The new tension sheave in the pit shall be mounted in a weighted steel frame securely fastened to the main car or counterweight guide rails and provided with guides or pivot points to enable free vertical movement. The existing tension sheaves may be reused if suitable. Provide adequate bearings to ensure noiseless operation.
- D. Sleeves and Guards: Provide sleeves for conduit and other holes, projecting above the concrete slab. Provide 2" steel angle guards around cable or duct slots. Provide rope guards for all sheaves and cables.
- E. Elevator Communication Terminal (ECT): Provide in the machine room the communication connection terminals (twelve terminal connection points per elevator of which four will be future connection points) in a (NEMA) waterproof rated metal box with removable cover for connection signal, telephones, jacks, speakers etc. Clearly identify each connection terminal used and include a minimum of four (4) additional spare connections. The terminal box shall be boldly labeled on the exterior "ELEVATOR COMMUNICATION TERMINAL."
  - Locate terminal box on wall near disconnect means, or at a location approved by the Architect and at a height where safe normal passage in the machine room (MR) will not be impeded. Provide all necessary wiring between ECT and controller.
  - Terminal block connections are as follows:
    - a. Emergency phone

- b. Fireman's phone
- c. Monitoring system modem
- d. Spares
- F. Stop Switches: Provide new stop switches in secondary levels for each elevator. See article "Hoistway."

### 2.6 HOISTWAY:

- A. General: Except as noted, existing equipment shall be refurbished and retained if compatible with new operation and components. Provide any modification or addition necessary to meet current codes and standards.
- B. Guide Rails: Retain existing car and counterweight guide rails and brackets. Thoroughly clean all guide rails of grease, oil and other foreign substances, file and remove all rough edges and surfaces and tighten brackets, bolts and guide clips for smooth and quiet operation of car and counterweight. Replace any missing fasteners.
  - Provide any required rail backing and/or intermediate tie brackets to comply with Code.
  - 2. Guide rails shall be realigned with a maximum deviation of 1/8 inch from plumb in all directions. Show guide rail loads on safety application on shop drawings.
- C. Buffers: Provide new pit-mounted car and counterweight buffers having adequate stroke designed to bring a fully loaded car to a stop. Buffers shall conform to code. Ensure that new buffers are compatible with existing buffer stands.
- D. Counterweight Frames: Retain the existing counterweight frames. Thoroughly clean and secure all fastenings. Install new fastenings matching existing fastenings were missing. Add or remove weights to assure proper counterbalance. Metal filler weights shall be held securely in alignment with tie rods passing through holes in the weights and frame members. Equip rods with locknuts secured by cotter pins at each end.
  - Counterweight and Guard: Counterbalance each elevator with weight equal to weight
    of elevator car plus 40% rated load for gearless machines. Provide counterweight
    screen at least 6' high at bottom of hoistway except where type of hoisting rope
    compensation prevents its installation.

# E. Hoisting and Governor Ropes:

- Hoisting Ropes: Provide new preformed, pre-stretched hoist ropes of proper size and number to insure good wearing qualities. Hoisting ropes shall be designed for elevator service, with flexible construction traction steel with lubricated fiber core; sized and provided with number of strands to suit load imposed. Ropes shall be free of kinks and displaced or broken wires. As a minimum, the number of ropes shall comply with the factor of safety requirements of the Code, Rule 212.3.
- Governor Ropes: Provide new governor ropes, of construction and composition required for the governor furnished. Under normal operation of the elevator, the governor rope shall run free and clear of rope guards and other stationary parts.

 Wedge Sockets: Provide adjustable wedge sockets with rods for each end of the ropes. All wedge sockets shall be prevented from twisting. Provide sound-deadening material.

# F. Normal and Final Terminal Stopping Devices:

- 1. Normal Device Operation: Provide new solid state normal terminal stopping devices.
- 2. Final Device Operation: Provide new final limit switches.
  - a. Final limit circuit shall have an exclusive connection to the safety string circuit.
- 3. Rollers: Switches shall be equipped with engaging arms provided with polyurethanetired rollers for engagement with cams.
- G. Car Sheave, Overhead Sheaves and Deflector Sheaves: Replace all existing sheaves. Replace with same size sheaves and new roller bearings, identical support blocks and shafts. Provide all sheaves with guards where necessary. Realign all sheaves. Alignment will be checked at the final inspection.
- H. Fascia, Toe Guards, Dust and Hanger Covers (Reuse or Replace): Thoroughly clean, make all fastenings secure, replace missing fascia, toe guards, covers or fastenings, and paint with one coat of machinery enamel. Replace missing dust covers of comparable gauge with new where missing. Install new fastenings matching existing fastenings where missing.
- Struts and Headers (Reuse): Thoroughly clean, make all fastenings secure, and paint with one coat of machinery enamel. Install new fastenings matching existing fastenings where missing.

## J. Pit Equipment:

- Emergency Switch: Provide manually operated, enclosed-type switch. Provide either
  red operating handles or red pushbuttons, permanently labeled as to function with the
  words: "STOP" and "RUN." Conspicuously label the switch with "Emergency Stop
  Switch." When operated, power shall be removed from the hoist motor and brake.
  Replace existing stop switch and install new near the top of the new pit ladder.
- Outlet: Provide as described in the paragraph "Switches, and Outlets." Coordinate location with the Architect.

### 2.7 HOISTWAY ENTRANCES:

- A. General: Existing door panels, hangers, closers, tracks, door guides, sight guards, astragals, and bumpers shall be replaced at all floors. Reuse existing struts and hanger supports. Clean and paint accessible surfaces. Replace any corroded hardware.
- B. Hangers and Tracks General: Provide sheave type two point suspension hangers and tracks complete and suitable for the type of door operation specified. Provide two (2) hanger units per door panel fastened to the door panel. Fabricate sheaves of steel with a flanged groove in which a solid polyurethane tire shall be securely vulcanized. Sheaves shall include ball bearings sealed to retain grease lubrication and shall be mounted on steel housings arranged

for attaching to the doors. Hangers shall be provided with ball bearing adjustable rollers (vertical and horizontal) to take the upthrust of the doors. Tracks shall be cold drawn steel with surfaces shaped to conform to the tread of the hanger sheaves and rollers. Equip each car door panel with new 2-sheave type, 2-point suspension hangers with provisions for vertical and lateral adjustment.

- C. Frames (Refurbish): Reuse the existing entrance frames and recondition. Painted metal areas will be refurbished by others. Provide raised floor designations with braille signage which shall be permanently attached with contrasting color background and 2 ½" square in size at height of 60" above floor. Refurbish bronze jambs removing scratches and restoring the finish to as new brushed condition.
- D. Sills (Refurbish): Sills shall be cleaned, all fastenings secured or replaced if missing and any loose or missing grout replaced.
- E. Door Panels: Provide hoistway entrances with flush two-speed side-opening hoistway doors as appropriate rated 1-1/2 hours. Fabricate door panels of min. 16 Ga. sheet steel, flush-type construction and not less than 1- 1/4" thick. Weld continuous stiffener channels in top and bottom of door panels. Reinforce door panels with steel hat channel stock of nominal 0.04" thickness. Each panel shall bear the inspection label of approval from an approved independent fire testing service. Door panels filled with gypsum board will not be accepted. Fasten the non-vision wing of 16 ga. metal extending full height of panel to leading edge of fast speed panel of two speed doors. Doors shall be provided with rubber bumpers located at top and bottom for stopping doors at their limits of travel in the opening direction. Bumpers shall be provided on strike jambs. Provide hole and escutcheons in appropriate location to facilitate opening of elevator door for inspection. Match existing for finish.
- F. Sight guards shall be provide on the leading edge of side slide doors. The sight guards shall be of 0.06" inch formed metal of the same material and finish as the landing side of the doors.
- G. Interlocks and Contacts: New interlocks shall be electro-mechanical and function as a hoistway unit system without a retiring cam, to prevent operation of car until all doors are locked in the closed position, as specified in the Code. Interlocks shall be compatible with the other door operating components. Provide emergency unlocking devices where required to conform to Code requirements.
- H. Access Switches: Provide new keyed access switches at the top and bottom floors. These switches shall be keyed with the same key as the inspection service switch. This switch is to allow the mechanic to have exclusive control of the elevator while either in the pit or on the top of the elevator. Limit travel of bottom key access switch to one floor.
- Floor Numbers: Stencil painted 4" high floor numbers in contrasting color within the hoistway per Code.

### 2.8 PASSENGER CAR FRAME AND PLATFORM:

- A. General (Refurbished): Reuse existing frames and platforms. Check for proper alignment and correct if necessary. All bolt connections shall be checked, tightened or replaced where necessary. Provide balancing weights and frame as required to achieve true static balance front to rear and side to side.
- B. Guide Shoes/Rollers: Provide passenger cars and counterweight frames with four (4) sets of new guide roller assemblies. Provide each wheel with 2 ball bearings having total indicator run (TIR) of not more than 0.002". The guide shall consist of at least 3 neoprene rollers mounted on a substantial metal base. The design of the guide shall be such that all rollers shall have continuous contact with the corresponding guide rail surface under all conditions of loading. Pin roller guides after adjustment. Adjust all rollers guides to equal torque loading not to exceed 50 foot-pounds.
  - 1. Auxiliary Guides: All car and counterweight guides shall be equipped with an auxiliary guiding device for each guide shoe which shall prevent the car or counterweight from leaving the rails in the event that the normal guides are fractured. These guides shall not, during normal operation, touch the guiding surfaces of the rails. The auxiliary guides shall be fabricated from hot rolled steel plate and shall be mounted between the normal guide shoes and the car or counterweight frame. The auxiliary guides may be an extension of the normal guide mounting plate, if that plate is fabricated from hot rolled steel. The portion of the auxiliary guide which comes into contact with the rail surface in the event of loss of the normal guides shall be lined with an approved bearing material to minimize damage to the rail surface. Submit design and sample of bearing material to the Architect for approval.
- C. Car Sills: Provide new bronze colored nickel silver sills.
- Car Top Control Stations: Provide new, per Code. Attach securely to the crosshead on the hoistway door side.
- E. Safety Device: New safety device shall conform to code. Equip each car with an undercar safety, mounted on car frame. The guide grips shall be Type "B".
- F. Toe Guards: Provide per Code where missing or refurbish as necessary. Paint with enamel paint color as directed by the Architect.

### 2.9 PASSENGER CAR ENCLOSURE:

A. General (New): Except as otherwise indicated, provide new car enclosures, as specified. Include ventilation, lighting, ceiling finish, wall finish, access doors, doors, power door operators, sill (threshold), trim, accessories, top of car locked emergency exit. Floor finish will be furnished and installed by the Government. Allow about 1/8 inch for carpet tile installation. Provide horizontal sliding flush panel type doors, with operation and number of panels as indicated. Provide manufacturer's standard protective edge trim system for door and wall panels, except as otherwise indicated. Provide sight guards on door edges.

- 1. Materials and Fabrication: Provide selection as indicated for each car enclosure surface; manufacturer's standards, but not less than the following:
  - Side and Rear Walls: Wall panels as described below..
  - b. Front returns and Control panel: Bronze.
  - c. Sills: Bronze tinted Nickel Silver with grooved surface 1/4" thickness.
  - d. Fabricate car door frame integrally with front wall of the car.
  - e. Fabricate car with recesses and cutouts for signal equipment.
  - f. Lighting: Down lights and perimeter lighting.
  - g. Floor: Carpet tile will be provided and installed by the Government. Coordinate the installation with the Architect.
  - h. Base: Provide and install satin brass base.
  - i. Wall panels:as shown on the drawings and as described below.
    - 1. Wall panels shall be removable, configured as shown on drawings. Fasteners for attachment of panels cab walls to be concealed-use "Z" clips. Provide adequate support for each panel. Attachment device will need to be removed and reinstalled without causing damage to the seating mechanism used to attach to the backing for numerous removals and reinstallations. Veneers shall be of adequate thickness to prevent warping and checking.
    - 2. Seal all wood to include fronts, backs, reveals and sides, both visible and hidden surfaces. The wood sealer will match the finish that will be provided in the control sample from the Architect of the Capitol. The sealer must meet code for wood finishes in elevators.
    - 3. All wood for stiles, rails and frames is to be solid bird's eye maple, quarter sawn. Use current AWI Premium standard for all corners, joints and intersection for stiles, rails and frames. Attach frames to panels; do not impede expansion/contraction of various components. Backing attached to cab may be MDO, min. ½ inch thick.
    - 4. Finish of woodwork shall be post-catalyzed lacquer, Premium grade, satin sheen (see AWI Stds., 1500-T-14, which requires minimum of vinyl sealer, 220 grit sanding, and 2 topcoats; bleaching, staining, and fillers shall be also used, as required to achieve uniform finish).
    - 5. Provide sample with final colors. Sample to be a 12" x 24" with frames, panels, stiles, rails and backing. Show two panels as part of the sample. Sample, once approved, will become a Project Control sample. This will include all finishes, stile attachments, frame attachments, free floating panels, attachment devices and type of backing materials.
    - 6. Provide the detail of the materials and methods to eliminate grid vibration and ensure long life of vibration eliminating components.
- B. Handrails: Furnish and install hand rails and matching brackets of solid bronze bar of the dimensions shown on the contract drawing. Installation heights shall be as indicated.

- C. Ventilation System: Provide new and arrange to exhaust air through and across ceiling.
  - 1. The system shall include a blower driven by a direct connected motor and mounted on top of car with rubber isolation to effectively prevent transmission of vibration to the car structure. The blower shall have not less than two operating speeds with a rated free delivery air displacement of approximately 325 and 290 C.F.M. at the respective speeds. The unit design and installation shall be such that the maximum noise level when operating at high speed shall not exceed 5 decibels from a point approximately 5 feet above the car floor.
  - 2. A three position switch to control the unit shall be provided in the car service cabinet.
  - 3. The fan or car ventilation shall be so arranged for automatic starting and stopping. When elevator has static control, the fan shall be arranged to start automatically when there is a demand for service and stop a predetermined time (approximately 2 minutes) after car has answered the last registered call.
- D. Car Lighting: Provide car light switch in the car operating panel to turn car interior lighting on and off. Provide car interior lighting meeting code requirements. Provide surface mounted, four foot long, fluorescent fixtures mounted along the sides of the ceiling of the car. Where car dimensions exceed 4 feet, stagger the lighting installation. Use T8 rapid-start lamps, rated 32 W maximum, nominal length of 48 inches, 2800 initial lumens (minimum), CRI 75 (minimum), color temperature 3500 K, and average rated life 20,000 hours. Allow adequate spacing between the ceiling edge and the cab wall to permit penetration of the light into the passenger compartment and allow easy tube replacement. Install Man-D-Tec low voltage halogen light fixtures in the ceiling panels as shown. Coordinate the emergency exit of the dome with the a removable ceiling panel. These ceilings will be the same design as Elev. No. H-4 in the U.S. Capitol Bldg. Submit design for approval.
- E. Emergency Car Lighting: Provide emergency lighting system for each car consisting of a rechargeable battery, charger, controls and light fixture. The system shall automatically provide emergency light in the car upon failure or abnormal interruption of the normal car lighting service and shall function irrespective of the position of the light control switch in the car. The system shall be capable of maintaining a minimum illumination of 1.0 foot-candles when measured 4 ft. above the car floor and on the main operating control panel for a period of not less than 4 hours.
  - 1. Battery: 6 volt min., sealed, maintenance-free, of either lead-acid or gel cell construction and designed to provide a life expectancy of not less than 10 years. The term "sealed" specified means sealed against loss of electrolyte and against gassing, except for over-pressure vents which shall be leak-proof. Batteries using adaptor type water conserving or catalytic devices are not acceptable.
  - 2. Charger: The charger, including rectifier and controls, shall be solid-state, except load relay, if used, shall be hermetically sealed. The charger shall be of

- two-rate design and shall be capable of restoring the battery to full charge within 16 hours after resumption of normal power supply following a continuous discharge of four hours through the connected lamp load and automatically maintaining the battery in full charge under normal power supply conditions.
- 3. Housing: House the battery, charger and controls in an enclosure fabricated of either sheet steel or molded high-impact plastic with a dust-tight cover. Design the enclosure for permanent mounting on the elevator car top and of sufficient strength to support a 200 lb. person without malfunction or damage.
- 4. Test Switch: Provide on the exterior of the enclosure, a constant pressure switch that automatically returns to the "OFF" position when released and a pilot light for periodic testing of battery and lamps.
- 5. Light Fixture: The light fixture shall consist of reflector, lamps, lamp sockets, lens and housing suitable for mounting on or above main control panel. Two lamps of equal wattage incandescent or fluorescent type shall be provided.
- F. Car Doors: Provide new car doors, new door hangers, tracks, interlocks, closures and relating cables. Door panels shall be labeled as evidence of conformance with the construction, installation, fire test and labeling requirement of the Al7.1 Code. Certificate may be furnished in lieu of labels for oversized entrances.
  - 1. Provide new tracks for hangers comparable to those supplied for the hoistway doors.
  - 2. Tracks shall be fastened to the header at frequent intervals to insure permanent track alignment.
  - 3. Provide new electrical contacts arranged to operate with the car doors so that the elevator cannot be operated unless the doors are closed or within the tolerance allowed by A17.1.
  - 4. Passenger Restraining Device: Provide passenger restraining devices in conformance with the A17.1 Code, to prevent opening of car door from inside the elevator if the elevator is outside its landing zone.
  - 5. Provide new sight guard attached to leading edge of car door, except where a re-opening device or devices on the car door or car require the omission of the sight guard. The sight guards shall be .06 inch thick formed of the same material and finish as the car side of the door.
  - 6. Entrance Wiring: The interlock wiring of all elevator entrances shall conform to the requirements of the A17.1 Code. Termination in the interlock box shall be sleeved with an fire-resistive eyelet or other approved type jacket.
  - 7. Provide new car door panels in 14 gauge bronze so that interior faces match material and finish of the return panels. Provide manufacturer's standard protective edge trim system for door panels, except as otherwise indicated. Car Doors shall be hollow metal flush panel construction, not less than 1 inch thick. The door shall be hung on two point suspension sheave type ball bearing hangers similar to those specified for hoistway doors except that sheaves shall be of sound reduced design. The door panels shall be rigid and reinforced for installation of hangers, door operating equipment, door reopening device and hardware, and unlocking zone device. Each door panel shall be

guided at the bottom by two nylon or composition gibs engaging door threshold grooves with a minimum clearance. Gibs shall have fire stops bent and be easily replaceable, without removing doors from hangers. Rubber bumpers shall be provided for door similar to those specified for hoistway doors. Facing shall be extended around the edges of the panel and returned ½ inch minimum around the outside of the hoistway face.

- G. Door Operator: Provide automatic high speed, heavy duty, closed loop door operators with minimum ½ HP alternating current drive motor, fabricated to open and close car and hoistway doors smoothly under all operating conditions for each elevator. Fabricate operating levers of heavy steel members with all pivot points provided with ball or roller bearings. Design operator to withstand, without damage, ordinary reversal of door panels. Affect reversal from intermediate position without delay, operating smoothly, continuously, and without jerk, rebound or slam.
  - Car and hoistway doors shall simultaneously open automatically when a car arrives at
    a terminal to permit egress of passenger(s) whether or not the terminal floor call has
    been registered in the car and automatically close the doors simultaneously at the
    expiration of the open timing.
  - 2. Provide door operators which are capable of operating doors from closed position to within 3" of "full-open" position at speed of 3 fps. When in "Automatic" operation, close doors at approximate speed of one foot per second after predetermined time interval. Accomplish reversal of direction of the doors from the closing to opening operation, whether initiated by the door edge reopening device, the photoelectric device or the door open button, within no more than 2-1/2" of door movement. Particular emphasis is placed on obtaining quiet interlock and door operation and smooth, fast dynamic braking for door reversals and stopping of the doors at both extremes of travel.
    - a. Provide high internal resistance type motor capable of withstanding high currents resulting from stall without damage.
    - b. Arrange door operating mechanism so that in case of interruption of power or failure of the operating circuits the car and hoistway doors can be readily opened by hand from within the elevator car. It shall not be possible for the doors to open by power unless the elevator is within the leveling zone.
  - 3. Door protection timers shall be provided for both the open and close directions which will help protect the door motor and prevent the car from getting stuck at a landing. The door open protection timer shall cease attempting to open the door after a predetermined time in the event that the door is prevented from reaching the open position. The door close protection timer shall reopen the doors for a short time in the event that the door closing attempt fails to close door locks after a predetermined time.
  - 4. Provide a car call dwell timer with an adjustable range of from 1.0 seconds to 3.0 seconds. Set the timer at 2.0 seconds. The control circuitry shall be such that with the initiation of the car door detector system, the dwell time shall be reduced over an adjustable range from 3/4 seconds to 1-1/4 seconds.
  - 5. Provide a hall call dwell timer with an adjustable range of from 2.0 seconds to 6.0 seconds. Set the timer at 4.0 seconds. The control circuitry shall be such that with the

- initiation of the car door detector system, the dwell time shall be reduced over an adjustable range from 3/4 seconds to 1-1/4 seconds.
- 6. Provide a car call, hall call, coincidence circuit which in the event an elevator is responding to the same car call and directional hall call, that the hall call dwell time will have precedence. In the event of this condition, the initiation of the car door detector system will not reduce the hall call dwell time.
- 7. Mount door operator on car door header braced to the car frame independent of the car enclosure to prevent any movement of the car during the opening and closing of the car door.
- 8. Provide new door operator header constructed of at least 3/16" thick steel and so shaped to provide stiffening flanges at top and bottom, extending its entire length.
- H. Infra-Red Photoelectric Curtain: Provide a new infra-red photoelectric curtain door protective devices consisting of a minimum of 30 beams spaced at even intervals, starting at approximately 2" above finish floor and continuing to approximately 6' above finish floor. The unit is to be housed in a low profile unit, mounted on the car doors and located between the car and hoistway doors. Old units shall be salvaged and delivered to the AOC. Match door curtains as used in other elevators in the building.
  - Interruption of the light beams during the door closing cycle shall automatically cause
    the doors to reopen fully and remain open until the light beam is reestablished. There
    shall be an adjustable time delay after the doors are fully open and after the light beam
    is reestablished before the doors start to close.
  - 2. Provide pulsed screen car door protective device projecting across entire entrance opening. Arrange controls to prevent elevator operation if device in not operative. If detector is obstructed for a predetermined, adjustable interval (10 30 seconds), sound buzzer and attempt to close doors with a maximum of 2.5 ft-lbs pounds kinetic energy. Timers shall be individually adjustable.
  - 3. Fireman's Service: During fireman's service operation the doors shall respond in conformance provisions of the section "Unprotected Entrances" ASME A17.1 Rule 112.5 which states that the doors shall close with 2.5 ft-lbs or less of kinetic force.
  - Nudging Action: Activate if circuit is in original operation. In the event a light beam is continually obstructed for a predetermined time interval (15-17 seconds) after automatic door closing has been initiated, a buzzer shall sound and the doors shall be closed at a gentle, reduced speed. Timers shall be individually adjustable.

# 2.10 CONTROL PANEL:

- A. General: Provide new main car control station for the elevator. Provide a flush mounted faceplate and a metal box containing the operating devices. The panel shall be mounted in front return panel. Submit drawings and samples for approval.
  - 1. Provide all control panels, LED's and buttons of the vandal resistant variety.
  - Provide car floor buttons corresponding to the floors served for registration of car stops. Car buttons shall not protrude beyond the faceplate when in the normal position. Call registered lights, located within or behind the buttons, shall illuminate the button corresponding to the call registered.
  - Exposed buttons and controls shall be suitably identified in conformance with ADA requirements.
  - 4. Provide an alarm button at the bottom of the car stations to ring a bell located in the hoistway.

- 5. Provide a door open button.
- 6. Firefighter's Service key switch, cancel button and light shall be located in the main car operating panels only.
- 7. Engrave car number on each operating panel.
- 8. Provide a locked service panel, described below, located below the main car control station, that contains the following controls:
  - a. A keyed stop switch, a toggle light switch, and a toggle fan switch.
  - b. A key-operated Independent Service switch to permit the selection of independent or automatic operation.
  - c. An audible signal to announce the stopping or passing of a landing served by the elevator.
  - d. A keyed inspection switch to permit the movement of the car from the hoistway access switches. Keying shall be same as access switch.
  - e. Each control device and its operating positions shall be identified by engraved letters painted black on the control panel surface.
  - f. Provide grounded duplex receptacle (GFI).
- B. Emergency Telephone and Firefighter's Communication System: Provide a hands free emergency telephone and Firefighter's Communications equipment as specified in the article "Communications Systems." New telephone system shall be compatible with existing systems.

# 2.11. SIGNAL EQUIPMENT:

- A. Hall Call Stations (New): Replace existing hall stations with new hall stations. Provide unit with flat faceplate designed for flush-mounting on wall with body of unit recessed in wall. Provide mechanical displacement type call buttons. Hall call buttons shall have illuminated registered directional arrow indicators and shall have their function indelibly, identified on the face plate by engraved symbols complying with ADA requirements. All disturbed surfaces shall be repaired using materials similar to those of adjacent surfaces.
  - 1. Finish: Match existing metal and finish. Bronze finish, U.S. No. 4.
  - 2. Mounting Location: Locate new fixtures positioned with centerline 42" above finish floor. Remove existing hall stations and patch remaining holes with materials similar to existing.
  - 3. Button Configuration: The buttons shall be of heavy and substantial construction with contacts and wearing parts of materials and sizes to meet the severe requirements of elevator service. Buttons shall be at least 3/4 inch in size.
  - 4. Landings Served: Provide new hall push-button stations at each landing as described: Provide 1-button station where only one direction of travel is available and indicate the travel direction.
- B. Hall Lanterns: Provide for both passenger elevator lobbies.
  - 1. New directional lanterns shall be provided for the elevator. They shall be mounted over the each entrance to indicate the arrival of the car in the hoistway. The indicator faceplate shall be of the same material as the existing entrance material. Each indication shall be illuminated from the rear by an individual lamp to provide a non-glaring, easily read indication. The lamp for each indication shall be shielded so as to illuminate that indication only.
  - 2. The directional arrows incorporated in the position indicator faceplate shall indicate direction of car travel. The arrow size shall be a minimum of 2-

- ½" in height. The "UP" directional arrow shall be illuminated green and the "DOWN" directional arrow shall be illuminated red. If, upon arrival at a landing, the direction a car will travel upon leaving that landing is not definitely predetermined, its' directional arrows shall be extinguished until the direction is established.
- 3. Audible Signal: Lantern shall contain a gong which will sound once for an upward traveling car and twice for a downward traveling car. Audible signal shall sound when approaching floors prior to arriving. The Audible Signal shall be no less than 20 decibels and with a frequency of no higher than 1500 HZ.
- C. Car Position Indicators: Provide new indicators combined with the scrolling message unit specified. Include the message "Senators Only" for the scrolling message unit. Use LED indicators. Remove components which interfere with the new bronze covers. Provide new "Up" or "Down" signal arrows and floor designations. See Elevator Schedule at the end of this section for floor designations. Grain shall match existing. Submit design for approval. Conceal fasteners from a person standing in the lobby.
- D. Car emergency signal bell: The car emergency signal bell shall be of the monitor type suitable for outlet box mounting and shall have a six (6) inch diameter gong. The bell shall be arranged to sound when the emergency alarm device in the car operating panel is pressed. The bell shall be energized by a suitable signal transformer connected through fuses to signal electric service source. Unless otherwise specified, the emergency signal bell shall be mounted in elevator hoistway at lower main terminal.

#### 2.14 COMMUNICATIONS SYSTEMS:

- A. General: Provide for each elevator an emergency hands-free telephone and fireman's telephone as described below. All emergency and intercommunication system wiring shall be in accordance with manufacturer's recommended specifications and provided in shielded and filtered conductors to prevent interference as required.
- B. Emergency Telephone: Provide a complete Emergency Telephone system. Provide single button, hands-free unit, telephone line powered, auto-dial, and capable of operating with Dual Tone Multiple Frequency (DTMF) as an integral part of the car station. Provide microprocessor controlled unit with no battery required (i.e., the microprocessor will utilize non-volatile memory). Operating range shall cover -20 deg. C to +60 deg. C. Register telephone under FCC Regulations, Part 68 and must comply with NEC 800-1(I) per UL1459. Telephone shall interface with existing systems and shall meet the following requirements:
  - 1. Match car control station material and finish.
  - 2. Equip telephone with a red emergency push button which automatically connects user to three pre-programmed (auto-dial) locations sequentially activated: the Superintendent's Office, the Elevator Shop and one additional 24-hour manned location. Equip emergency button with approved tactile identification. The emergency push button disconnect shall lockout during the initial calling cycle. Provide a red LED to indicate that the emergency call has been acknowledged. Provide auto-dialer(s) with 20 digit telephone number capacity, programmed to dial the sequential telephone number if the requested number is busy or does not answer. Provide for independent adjustment of speaker volume and microphone sensitivity. Provide three installation tools and deliver them to the Architect.

- 3. Telephone shall include the following programmable disconnect options:
  - a. LOCKOUT (Line Seizing): Call may only be terminated by the called party.
  - POSITIVE CONNECTION (DTMF DISCONNECT): DTMF receiver monitors the line until the "#" tone is received from the called party.
  - c. BACKUP: Interruption of the loop current when the called party returns on hook.
  - d. CALL SAFETY: DTMF receiver monitors the line until a continuous dial tone is detected for 15 seconds.
  - e. TIMEOUT (Dial tone disconnect): Independent time out, adjustable from 1 to 15 minutes (1 minute increments).
  - f. CALLER DISCONNECT: The calling party may disconnect by depressing this button after the initial time on feature disables.
  - g. TIME ON: The 8 10 second period where manual disconnection is not possible.
- 4. Telephone shall be user-programmable. Access to the DTMF programming mode shall require an authorization code number which may be modified by authorized government personnel. The telephone may not contain any mechanical programming devices that may be compromised or changed by unauthorized access to the telephone enclosure. Provide a written record of the access code to the Architect.
- 5. Auto Answer: When called from the monitoring station, the telephone shall provide a path for conversation or monitoring (when in monitoring mode, a labeled indicator lamp shall light or flash to inform the car occupant that the monitoring system is in use), and provide remote operational verification capability.
- 6. Auxiliary Output: Provide an isolated auxiliary output terminal to protect telephone circuitry from transient voltage while providing an activation signal for ancillary equipment (i.e., CCTV actuation or security VCR activation).
- Provide a complete circuit from the cab to the machine room through the car controller to the elevator Communications Terminal.
- C. Firefighter's Elevator Communications Equipment: Provide a complete elevator fire communications system. The system and all components shall be listed by an approved, nationally recognized testing laboratory for fire signaling use, meeting all requirements of National Fire Protection Association (NFPA) Standards 72 (1999), except as modified herein.
  - Equipment Qualifications: All components of the system shall be furnished by a single manufacturer, shall be of current design and shall be in regular and/or recurrent production.
  - 2. System Requirements: The system shall function as a common talk, closed circuit, supervised firefighter's telephone communication system. The system shall include, but not be limited to, an approved phone station in all elevator cabs, approved fire rated wiring between the elevator and its associated machine room terminal identified in "Life Safety Terminal," and the communications terminal.
  - Physical Requirements: Provide flush mounted remote firefighter's telephone stations. Equip each station with a hinged door, latched by means of a top and

- bottom magnetic catch. Permanently wire handset in place with strain-relieved stainless steel armored cable that will not prevent the phone from being hung-up and cradled. Each handset shall be red high-impact thermo-plastic (polycarbonate, etc.). Equip with a push-to-talk switch, which will signal the master control station. Install the firefighter's phone in the left return above the auxiliary control panel for each elevator.
- 4. Telephone wiring: An additional telephone wire from the firefighter's telephone cabinet in the elevator which is to be clearly labeled, "Fireman's Telephone Spare" at each terminal. Engrave cover plate using a contrasting background with the words "Fireman's Telephone."

# 2.15 ELEVATOR MONITORING SYSTEM:

- A. General Description and Purpose: Provide a remote dedicated computerized monitoring system for acquiring, recording and reporting information about elevator operation. The system shall be capable of detecting elevator malfunctions, gathering statistics, reporting and recording alarms, displaying real-time car status and performing traffic analysis. It shall be user programmable and field configurable. Inputs shall not be dedicated to any particular elevator function. It shall be adaptable to all elevator control equipment, new or existing, relay based or microprocessor based.
  - 1. System Description: Distribute the data acquisition, data processing and data recording capabilities of the system, to independent operating nodes or stations. Provide a minimum of 1 Remote Station in each elevator machine room containing elevator control equipment. Equip the Central Station and the Remote Station with one personal computer providing data processing and data storage capabilities. Report information collected and stored at the remote station to the Central Station by periodic communications over an Ethernet network using shielded twisted pair conductors. Where cable runs exceed 300 feet, provide switchers for signal boosting at locations directed by the Architect. Submit network plans for approval. Equip each controller, with exterior access via cable and a new lap top computer. Install necessary software on the laptop and demonstrate during acceptance testing. Report information collected and stored at a remote station to the Central Stations by periodic communications over a data transmission medium. Report all alarms to central station printer as described below. System shall be expandable to monitoring 50 elevators or elevator systems in the Capitol.
    - a. Operating Systems: The operating systems shall be MS-Windows XP Professional SP1. Backup software will be provided on floppy disks and CD-ROM. It shall be possible for the user to install or reinstall monitoring system software at the main station or remote station.
    - b. Computer Hardware (Central Station and Remote Station):
      - Hardware PC: MS/Windows compatible personal computer with 32-bit, 2.4 Ghz processors, server rated with necessary (minimum 1 GB expandable to 8 GB) RAM, dual core type with hyperthreading support, USB keyboard, min. 15 in. Diagonal flat Screen color LCD high resolution monitor, fixed-disk storage devices (minimum 40.0G) to store data for time periods specified. Provide additional hardware for data acquisition,

- elevator control interface and elevator control isolation are required. Include a CD-ROM drive, at least 4-RS432 serial ports, 2- RJ45 Ethernet ports, 4-USB ports, a parallel port cable and an internal 3-1/2" floppy drive. Provide a 2 button, USB scroll mouse.
- 2. Hardware Laptop: MS/Windows compatible laptop computer with 32 bit, 1.8 Ghz processor with necessary (minimum 512 MB) RAM, keyboard, Flat Screen color LCD high resolution monitor, fixed-disk storage devices (minimum 20.0G) to store data for time periods specified. One (1) internal 56 K modem with additional hardware for data acquisition, elevator control interface and elevator control isolation are required. Include a DVD ROM drive, PCMCIA card, IR port, telephone cable and a 3-1/2" floppy drive.
- c. Computer Software (Central Station) Requirements: Provide, within thirty (30) days of start of construction, load and test all necessary software to complete connection and communication between the new main station and the new remote station addressed in this Contract.
- d. Data retention: The data received by the main station monitoring system shall not suffer any loss or corruption of that data due to power loss to the controller cabinet.
- e. Mechanic Diagnostic interface: The interface between an elevator mechanic and a main station will be through the programmable comports mentioned earlier via a new laptop computer.
  - The Contractor shall load on to the laptop computer all necessary software needed to complete communications with the controllers.
- 2. Data Processing (Input) Logic: User programmable logic shall allow the input signals detected by the system to be combined using these logical operators or their equivalent: "and," "or," "and not," and "or not." It shall be possible for the system to delay the recognition of any signal in increments of no more than one second, up to at least 99 seconds. It shall be possible for the user to invert input signals (treat the presence of voltage as the absence of voltage, and vice-versa). It shall be possible to combine at least eight input signals using logic, time delay, and signal inversion, in any combination. The programming which governs the way the system combines inputs to recognize events shall be completely under user control.
- 3. User Programmability: The system shall be user programmable and field configurable. Raw data shall be processed, reported and recorded according to user programmable instructions. It shall be possible for the user to change the way the system processes raw data, to edit the definition of monitored events and to edit the real-time car status display.
- 4. Human Interface: All command options shall be selectable by menu selection. All system commands shall be via keyboard or mouse entry. It shall be possible for the user to enter all of the commands necessary for system operation without exiting the monitoring program and without entering DOS commands. All screen prompts and menu selections which are not user programmable shall be in plain English words. User programmable messages and descriptions, such as

- alarm reports, shall also be plain English messages, the exact wording of alarms and/or reports to be proposed by Contractor for approval by the AOC.
- Definition of Monitored Events: It shall be possible for the user to define an
  event identified by the presence of a particular input or combination of inputs.
  The user shall be able to control the manner in which an event is reported and
  recorded.
- B. Central Stations: Through the security system it shall be possible to edit user programmable features or main station assignments from one (Elevator Shop) central station. It shall be possible to view real-time elevator displays at any main station, and to print reports at the central station.
  - Central Data Storage: All of the alarms which are automatically reported to a
    main station will also be transmitted, printed and stored automatically in the
    database at the central station. It shall also be possible for the user to selectively
    upload files from any main station in the system. Uploaded files shall also be
    stored in the database of the Central Station to which they are transferred and
    will remain available for report generation until purged.
  - 2. Real-Time Car Status Display: It shall be possible to view the current position of an elevator in the hoistway, the status of its doors, the direction of its travel, and other operational status by entering keyboard commands at the main station (for any elevator in the system) or at a remote station (for any elevator monitored by that remote station). The information displayed shall be user programmable.
  - 3. Multiple Reporting Locations: The system shall be capable of supporting up to four main stations. If more than one main station is provided, it shall be possible for alarms to be automatically communicated to all main stations. The reporting of an alarm to one main station shall not exclude the reporting of that alarm to another main station.
  - 4. Alarm viewing and Print out: Provide capability to report from all main stations to Elevator Shop central station computer and printer, all alarm activations. Each alarm report received at a central station will, if designated by the user, (1) appear on the screen, (2) be printed on a printer and (3) sound an audible tone. Each alarm report shall have the following information:
    - a. Building name
    - Elevator number
    - c. Date and time of alarm
    - d. Name of alarm and type
    - e. Floor elevator is at or was last located and direction of travel when alarm was activated
    - f. Definition of alarm (if relevant)
- C. Remote Station (Elevator controller and/or group controller): The remote station shall have a minimum of six (6) programmable com port connections for connection to a lap top diagnostic computer located on a readily accessible surface of the subject cabinets and capable of diagnostic and report communication. Information shall be stored and accessible through the main station com port via lap top computer. It shall be possible for each individual controller main station to operate independently and to store all of the alarm and statistical data it acquires for up to 30 days. All of the elevator control

equipment to be monitored in a machine room shall be monitored by one individual/group main station.

- Method of Acquiring Data: Each remote station shall have discrete inputs which shall be connected to test points in elevator control circuitry. The monitoring system's input circuitry shall be generic, capable of detecting discrete AC or DC signals over a wide range of voltages. The system shall be adaptable to controllers made by any manufacturer.
- 2. Automatic, Centralized Alarm Reporting: Each remote station shall be capable of automatically reporting user designated alarms, such as those signifying elevator shutdowns, to one or more main stations (central reporting locations). The medium over which such automatic reports shall be communicated shall be voice grade telephone lines equipped with modems (or an approved equivalent of modem communications). All reported alarms will be stored in the database at the main station.
- 3. Main Station Message Queue: It shall be possible for the user to program a main station to report alarms to a central station as soon as they are detected or to delay reporting them for a specified length of time. The time delay shall be programmable in minutes and seconds up to at least one and one half hours. The remote station shall be capable of storing at least 400 reportable alarms without reporting them to a main station and without interfering with the normal collection and storage of data by that remote station. The remote station shall continue to function normally, even if the communications link is inoperative or if any or all main stations are off line.
- 4. Input circuitry, isolation and breakdown voltage: The monitoring system shall be capable of safely monitoring safety strings and other critical elevator control circuits. Each and every input to the monitoring system shall be optically isolated. The breakdown voltage rating of the monitoring system's inputs shall be 300 volts RMS or more. The input circuitry shall be designed such that when connected to a relay type elevator controller, no malfunction of the input circuitry can (1) energize a relay on the monitored controller which should be energized or (2) de-energize a relay on the monitored controller which should be energized.
- 5. Number of Inputs: A remote station for a particular machine room shall be equipped with enough inputs to monitor at least 50 points on each elevator controller in that machine room.
- 6. Raw Data to Be Acquired: The inputs at each remote station shall be connected by hard wire to test points or output modules on the elevator controllers to be monitored. The signals monitored on these points will convey raw data to the central station. The exact points and signals to be monitored will vary with installed elevator equipment and will depend upon manufacturer, type of circuitry and the date of manufacture. A list of signals required to be monitored is as follows:
  - Raw data acquired for each elevator group:
    - Controller power status.
    - 2) Hall call power supply status.
    - 3) Hall calls registered.
    - 4) Fire service.

- 5) Emergency power, auto, manual.
- 6) Lobby smoke detector
- 7) Other smoke detectors
- 8) Lobby sensor bypass

# b. Raw data acquired for each individual elevator:

- 1) Car controller power supply status.
- 2) Car position and car direction.
- 3) Car run request (advance direction up, down).
- Car running status.
- 5) Brake status.
- 6) Car level.
- 7) Car safety string status.
- 8) Gate switch status and door lock status.
- 9 Car station stop switch status.
- 10) Car in zone (door zone).
- 11) Door closed and door open limit status.
- 12) Door open failure.
- 13) Door closed status.
- 14) Failure.
- 15) Doors nudging status.
- 16) Door safety edge failure.
- 17) Final limits status.
- 18) Governor switch status (overspeed).
- 19) Inspection service, independent service, or attendant status.
- 20) Emergency power (available, selected).
- 21) AC overloads and phase failure.
- 22) Attendant operation.
- 23) Car start failure.
- 24) Firefighters' Service phase I.
- 25) Firefighters' service phase II.
- 26) Car at designated floor and car at alternate floor.
- 27) Firefighters' Service door hold open.
- 28) Firefighters' Service phase II direction up or direction down.
- 29) Car calls registered.
- 30) Up normal limit or down normal limit.
- 31) Controller cutout switch.
- 32) Light ray or detector failure.
- 33) Light ray or detector cutout.

# Additional items in safety string:

- 1) Up final limit and down final limit.
- 2) Governor switch.
- 3) Safety operated switch.
- 4) Compensating sheave switch.
- 5) Top exit switch.

- 6) Pit exit switch.
- d. The exact list of points to be monitored will be compiled by the supplier of the remote monitoring system and will be submitted for approval.

# **PART 3 - EXECUTION**

# 3.1 SITE CONDITION INSPECTION:

- A. Prior to commencement of equipment installation, examine hoistway and machine room areas. Verify that no irregularities exist which affect execution of work specified.
- B. Do not proceed with installation until existing work in place conforms to stated project conditions.

### 3.2 PREPARATION AND PROTECTION:

- A. Protection: Furnish, erect and maintain catch platforms, lights, barriers, weather protection, warning signs and other items as required for proper protection of the public, occupants of the building, workmen engaged in work and adjacent construction. Multiple hoistways shall be screened from top to bottom during construction. All hoistway entrances under construction shall be barricaded, top to bottom. Barricade plan shall be submitted to the Architect for approval.
  - Provide and maintain temporary protection of the existing structure designated to remain where removal and new work is being done, connections made, materials handled or equipment moved.
  - 2. Maintain adequate fire extinguishers within sight of the work at all times that any cutting or torching operations are performed on the Work.
- B. Debris Containment: Take necessary precautions to prevent dust from rising by wetting removed masonry, concrete, plaster and similar debris. Protect unaltered portions of the existing building affected by the operations under this Section by dust-proof partitions and other adequate means.

# 3.3 REMOVAL OF EXISTING EQUIPMENT:

- A. General: Perform removal and alteration work as indicated, with due care, including shoring, bracing, etc. Be responsible for damage, which may be caused by such work, to any part or parts of existing structures or items designated for reuse. Perform patching restoration and new work in accordance with contract requirements.
- B. Provide means to remove existing and/or new equipment in the machine rooms. Provide any demolition and repair made necessary by this requirement. Submit the scope/plan of any necessary removal to the Architect for approval before starting work.
- C. Component Deposition: Materials or items designated to become the property of the Architect shall be removed with care and stored in a location designated by the Architect. Remove such items with care, under the supervision of the trade responsible for reinstallation; protect and store until required. Replace any material or items damaged in its removal to the satisfaction of the Architect. Materials or items removed and not designated to become the property of the Architect or be reinstalled shall become the property of the Contractor and shall be removed from the property.

# 3.4 ELEVATOR MODERNIZATION:

- A. General: Install equipment in accordance with Manufacturer's direction, referenced codes, and contract requirements. Install machine room equipment with clearances in accordance with referenced codes and contract requirements.
- B. New Equipment: Provide required new components and install in accordance with manufacturer's written instructions. Modify new equipment to accommodate existing conditions only in conformance with approved shop drawings.
  - Fabricate and assemble various parts in shop to minimize field assembly.
     Assemble parts which require close field fit in the shop and mark for field erection.
- C. Refurbished Equipment: Where existing equipment and fixtures are indicated to be reused, repair such equipment and fixtures and put in perfect working order. Coordinate required refinishing of metals, wood and like material with the Architect.
- D. Clean Existing Components Scheduled to Remain: Clean the following items of oil, grease, scale, and other foreign matter, and apply one coat of field-applied machinery enamel:
  - 1. All exposed equipment and metal work installed as part of this work which does not have architectural finish.
  - Machine room equipment.
  - 3. Neatly touch-up damaged factory-painted surfaces with original paint and color. Protect machine-finish surfaces against corrosion.
- E. Maintenance Provisions: Install items so they may be easily removed for maintenance and repair; and so that access for maintenance is safe and readily available.

# 3.5 CLEANING AND PREPARATION:

- A. Work Areas: Keep work areas orderly and free from debris during progress of project. Remove packaging materials on a daily basis as equipment is installed. Remove all loose materials and filings resulting from work.
- B. Machine Room: Clean machine room equipment and floor of dirt, oil and grease.
- C. Hoistways: Clean hoistways, pits, cars, car enclosures, entrances, operating and signal fixtures, and trim of dirt, oil, grease, and fingermarks.

### 3.6 PAINTING AND FIELD FINISHING:

- A. All equipment and metal work installed or reused under this contract, which does not have a baked enamel or special architectural finish and which is exposed in the hoistway, shall be cleaned and painted one field coat of enamel. The shank and base of the T-Section of the guide rails shall be thoroughly cleaned and painted one field coat of black metal enamel.
- B. All machine room equipment shall be painted upon completion of the installation with the manufacturer's standard machinery enamel. Machine room walls, machine room floors and hoistway walls shall be painted with a latex paint. Pit floors shall be sealed. The elevator shop foreman will approve the type and color of paint as well as the sealer. Do not paint the governors.

# 3.7 ADJUSTMENTS:

- A. Alignment of Guide Rails: Align guide rails vertically with a tolerance of 1/8" in 100'. Secure joints without gaps and file any irregularities to a smooth surface.
- B. Balance Cars: Balance cars to equalize pressure of guide shoe rollers on rails.
- C. Lubrication: Lubricate all equipment in accordance with Manufacturer's instructions.
- D. Adjustments: Adjust motors, generators, brakes, controllers, leveling switches, limit switches, stopping switches, door operators, interlocks and safety devices, etc., to achieve required performance levels.

# 3.8 ACCEPTANCE INSPECTIONS AND TESTS:

- A. General: Inspection and tests of the installed equipment shall be made in the presence of a representative of the Architect. Perform tests required by ASME A17.1 Safety Code For Elevators And Escalators, with procedures described in ASME A17.2 Inspectors' Manual for Elevators and Escalators. The Contractor shall be responsible for providing the necessary equipment (weights, meters, etc.) to perform any and all tests. Final acceptance shall only be given after all field quality control inspections and tests are complete, all submittals and certificates have been received. Accurate alignment of sheaves will be checked at time of final inspection to insure minimum rope wear.
- B. Required Tests: Perform the following tests:

- 1. Door operation and closing force.
- 2. Successfully completing capacity tests.
- 3. Successfully completing leveling tests.
- 4. Successfully completing all safety tests.
- 5. Starting, accelerating, running.
- 6. Decelerating, stopping accuracy.
- 7. Equipment noise levels.
- 8. Signal fixture operation.
- 9. Overall ride quality.
- 10. Monitoring system functioning properly.
- C. Test Results: In all test conditions, obtain specified speed, performance times, floor accuracy without re-leveling, and ride quality to satisfaction of the Architect.
  - Temperature rise in windings limited to 50 degrees Celsius above ambient. If equipment performance is questionable in the Architect's judgement, conduct a full-capacity, one-hour running test, stopping at each floor for 10 seconds in up and down directions.
  - Notify Architect 10 days in advance when ready for final review of each elevator
    unit or group. Include a Pre-Acceptance Test report including a safety test
    documenting the tests performed by the Contractor and the results.
- D. Performance Guarantee: Should these tests develop any defects or evidence of poor workmanship, any variance or noncompliance with the requirements of the specified codes and/or ordinances or any variance or noncompliance with the requirements of these specifications, the following work and/or repairs shall be completed at no expense to the Government:
  - 1. Replace equipment that does not meet Code or specification requirements.
  - 2. Perform work and furnish labor, materials and equipment necessary to meet specified operation and performance.
  - 3. Perform and assume cost for retesting required by Governing Code Authority and Architect to verify specified operation and/or performance.

# 3.9 INSTRUCTION AND DEMONSTRATION:

- A. Training: Provide two (2) separate training sessions, conducted by authorized instructors; each session shall be four (4) hours continuous duration and during the hours of 7 AM to 3:30 PM, Monday through Friday. The Architects' personnel designated to receive training will be identified to the Contractor prior to the scheduled training. The major topics and areas of instruction to be addressed in the training sessions are as follows:
  - 1. Troubleshooting of all the mechanical systems such as the door operators, safety interlocks, safety systems, etc.
  - Troubleshooting of the electrical/electronic control system and subsystems in conjunction with the use of the straight line and schematic diagrams provided by the Contractor.
  - Security feature setup
  - Closed loop door controller instruction and setup

- 5. Demonstrate the removal, installation and alignment of removable cab panels
- 6. Adjusting of the elevators will be scheduled and witnessed
- B. Scheduling: Training shall be done on the first Elevator after it has been completely finished, tested and ready for turnover to the Architect.

[See Elevator Schedule, next page.]

# 3.10 ELEVATOR SCHEDULE (EXISTING - ELEVATORS):

Item Description / Elevator	S-4
Controller Manufacturer	Montgomery
Controls	Simplex
Capacity (lbs)	2500
Speed (fpm)	400
Rise (Ft)	56'-6
Stops/Opening (Front)	4
Floor Designations	B,1,2,3
Hall Buttons (# Risers)	1
Hoist Machine	gearless basement
Hoist Machine Power Characteristics (V/Amps/HP)	240/86/24
Roping	2:1
Main (Designated) Floor	1
Alternate Floor	2
Car Size (W/D/H)	7'-3 X 3'-8X 7'-0"
Entrance Size (W/H)	2'-4-1/2 X 7'-0"
Entrance Type	Single side sliding
Door Protection	infrared

# **END OF SECTION 14212**

# **ATTACHMENT**

1

GENERAL DECISION: DC20080003 05/02/2008 DC3

Date: May 2, 2008

General Decision Number: DC20080003 05/02/2008

Superseded General Decision Number: DC20070003

State: District of Columbia

Construction Type: Building

County: District of Columbia Statewide.

BUILDING CONSTRUCTION PROJECTS (Does not include single family

homes and apartments up to and including 4 stories)

Modification Number Publication Date

0 1

02/08/2008 04/18/2008

05/02/2008

ASBE0024-001 10/01/2007

Rates

Fringes

Asbestos Worker/Heat and

Frost Insulator

Includes the application of all insulating

materials, protective

coverings, coatings and finishes to all types of

mechanical systems.....\$ 27.88

13.88

ASBE0024-005 10/01/2007

Rates Fringes

Fire Stop Technician.....\$ 22.95

6.39

Includes the application of materials or devices within or around penetrations and openings in all rated wall or floor assemblies, in order to prevent the pasage of fire, smoke of other gases. The application includes all components involved in creating the rated barrier at perimeter slab edges and exterior cavities, the head of gypsum board or concrete walls, joints between rated wall or floor components, sealing of penetrating items and blank openings.

\_\_\_\_\_

BRDC0001-001 04/30/2007

Rates

Fringes

Bricklayer....\$ 25.90

CARP0132-006 05/01/2007

Rates Fringes

Carpenters (Including Drywall		
Hanging)\$	24.37	6.15
Piledriver\$	22.87	6.85

ELEC0026-003 09/03/2007

Rates Fringes Communication Technician.....\$ 23.15 3%+6.87

SCOPE OF WORK: Includes low voltage construction, installation, maintenance and removal of teledata facilities (voice, data and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, railroad communications, micro waves, VSAT, bypass, CATV, WAN (Wide area networks), LAN (Local area networks) and ISDN (Integrated systems digital network).

WORK EXCLUDED: The installation of computer systems in industrial applications such as assembly lines, robotics and computer controller manufacturing systems. The installation of conduit and/or raceways shall be installed by Inside Wiremen. On sites where there is no Inside Wireman employed, the Teledata Technician may install raceway or conduit not greater than 10 feet. Fire alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit. All HVAC control work.

ELEC0026-016 11/05/2007

	Rates	Fringes
Electricians (Excluding Communication-Low Voltage Wiring)\$	34.55	11.39+a

a. PAID HOLIDAYS: New Year's Day, Martin Luther King Jr.'s Birthday, Inauguration Day, Memorial Day, Fourth of July, Labor Day, Veterans Day, Thanksgiving Day, the day after Thanksgiving and Christmas Day or days designated as legal holidays by the Federal Government.

ENGI0077-009 05/01/2007

	Rates	Fringes
Power equipment operators:		
Boom Trucks\$	26.47	6.82+a+b
Cranes (35 tons and above)\$	27.64	6.82+a+b
Cranes (under 35 tons)\$	27.18	6.82+a+b
Forklifts\$	19.90	6.82+a
Piledrivers\$	27.18	6.82+a

#### a. PAID HOLIDAYS:

New Years Day, Inaugural Day, Decoration Day, Independence Day, Labor Day, Martin Luther King's Birthday, Veterans Day, Thanksgiving Day, Friday after Thanksgiving and Christmas Day.

#### b. PREMIUM PAY:

Tower cranes and cranes 100-ton and over to receive \$1.00 per hour premium over Group One.

IRON0005-001 06/01/2007

Rates	Fringes

# Ironworkers:

Structural, Ornamental and

Chain Link Fence.....\$ 26.73 \_\_\_\_\_\_\_

\* IRON0201-003 05/01/2008

		Rates	Fringes
Ironworker	(Reinforcing)\$	26.15	12.08

LABO0657-001 06/01/2007

Rates Fringes Laborer: Skilled.....\$ 18.81

FOOTNOTE: Potmen, power tool operator, small machine operator, concrete labor including concrete preparation, signalmen, laser beam operator, waterproofer, open caisson, test pit, underpinnig, pier hole and ditches, laggers and all work associated with lagging that is not expressly stated, strippers, operator of hand derricks, vibrator operators, pipe layers, or tile layers (tile laid on road construction projects ONLY), operators of jackhammer, paving breakers, spaders or any machine that does the same general type of work, scaffold builders, operators of towmasters, scootcretes, buggymobiles and other machines of similar character, operators of tampers and rammers and other machines that do the same general type of work, whether powered by air, electric or gasoline builders of trestle scaffolds over one tier high and sand blaster,

power and chain saw operators used in clearing, installers of well points, wagon drill operators, acetylene burners

LABO0657-002 06/01/2007

and licensed powdermen.

	Rates	Fringes	
Laborers:			
Mason Tenders, Brick\$ Mortarmen, Scaffold	14.14	4.29	
Builders\$	14.90	4.29	

MARB0002-002 05/01/2007

				Rates	Fringes
Marble	&	Stone	Mason\$	31.00	11.52

INCLUDES pointing, caulking and cleaning of All types of

masonry, brick, stone and cement structures; EXCEPT pointing, caulking and cleaning of exisiting masonry, brick, stone and cement (restoration work)

MARB0003-001 05/01/2007

MARB0003-001 03/01/2007		
	Rates	Fringes
Mosaic & Terrazzo Worker, Tile Layer		
Marble Mason and Tile Layer.\$ Terrazzo Worker\$	24.67 25.42	8.78 8.78
MARB0003-004 05/01/2007		
	Rates	Fringes
Marble, Tile & Terrazzo Finisher\$	19.84	7.90
PAIN0051-004 06/01/2007		
	Rates	Fringes
Glaziers Contracts \$2 million and		
under\$ Contracts over \$2 million\$		7.46 7.46
PAIN0051-010 06/01/2007		
	Rates	Fringes
Painters: Brush, Roller, Spray and		
Drywall Finisher\$	23.31	7.31
PLAS0891-003 05/01/2007		
	Rates	Fringes
Cement Mason/Concrete Finisher\$	26.15	6.01
PLUM0005-007 10/21/2007		
	Rates	Fringes
Plumbers		

Apartment Buildings over 4 stories (except hotels), schools, colleges and speculative office buildings, strip shopping centers, churches, water coolers, room air conditioning units, appliances, packaged ice machines and light commerical refrigeration and/or air conditioning

systems serving a single business in a single story building and not to exceed 5. h.p. or tons, selfcontained package unit up to including 5 h.p. or tons.\$ 21.54 8.33+a ALL Other Work.....\$ 33.92 12.94+a

a. PAID HOLIDAYS: Labor Day, Veterans' Day, Thanksgiving Day and the day after Thanksgiving, Christmas Day, New Year's Day, Martin Luther King's Birthday, Memorial Day and the Fourth of July.

------

Rates

Fringes

Fringes

PLUM0602-006 11/01/2007

teamfitter,	Refrigeration &		
ir Condition	ing Mechanic		
Including HV	AC Pipe Work)\$	33.27	13.57+a

a. PAID HOLIDAYS:

New Year's Day, Martin Luther King's Birthday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and the day after Thanksgiving Day and Christmas Day. \_\_\_\_\_

SFDC0669-001 04/01/2008

	Rates	Fringes
Sprinkler Fitters	\$ 29.35	14.30
SHEE0100-002 07/01/2007	i	

	Rates	Fringes
Sheet Metal Worker (Including		
HVAC Duct Work)\$	31.54	11.65

Rates

SUDC2000-001 04/12/2000

ASBESTOS ABATEMENT WORKER (Removal from Floors,		
Ceilings, Walls and Mechanical Systems)\$	10.60	
Laborer, Unskilled\$	11.83	2.23

Pointer, caulker and cleaner INCLUDES pointing, caulking and cleaning of existing masonry, brick, stone and cement structures (restoration work); EXCLUDES pointing, caulking and cleaning of new or replacement masonry, brick, stone and cement.....\$ 20.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental. 

Unlisted classifications needed for work not included within

the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

# WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

> Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

> Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

> Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

# **ATTACHMENT**

2



CP-491 (4-04)

# REQUEST FOR CHECK OF CRIMINAL HISTORY RECORDS

Please report with: (1) A valid form of photo identification, (2) and this form to the Fairchild Building located at 499 South Capitol Street SW Washington, D.C., Room 127 between the hours of 7am until 3pm Monday through Friday for processing.

1. Name: (I	ast, First, Middle)	Str	ddress: reet & No ty & State: p:	Tele:	
2. Other Nat "None".)	mes Ever Used: (e.g. ma				1
3. Date of B	irth: (Month, Day, Year	)	4. Birthplo	ice: (City and St	ate or Country)
5. Social Sec	urity Number:	V			6. <i>Gender:</i> Male Female
7. Race:	8. Height:	9. Weight:	10. Eye C	olor:	11. Hair Color:
		RE AND RELEAS			8
	derstand that the informate Federal Bureau of Inv		e will be used to	check the crimin	nal history record
<ul> <li>I con me.</li> </ul>	sent to the use of the in	formation provided	in making a secu	rity determination	on concerning
• l cert	ify that, to the best of π ct, and complete, made		elief, all of the in	formation provi	ded above is tru

# **ATTACHMENT**

3

# ACH VENDOR/MISCELLANEOUS PAYMENT ENROLLMENT FORM

This form is used for Automated Clearing House (ACH) payments with an addendum record that contains payment-related information processed through the Vendor Express Program. Recipients of these payments should bring this information to the attention of their financial institution when presenting this form for completion.

# PRIVACY ACT STATEMENT

The following information is provided to comply with the Privacy Act of 1974 (P.L. 93-579). All information collected on this form is required under the provisions of 31 U.S.C. 3322 and 31 CFR 210. This information will be used by the Treasury Department to transmit payment data, by electronic means to vendor's financial institution. Failure to provide the requested information may delay or prevent the receipt of payments through the Automated Clearing House Payment System.

	AGENCY INF	ORMATION
FEDERAL PROGRAM AGENCY		
ARCHITECT OF THE C	APITOL	
AGENCY IDENTIFIER:	AGENCY LOCATION CODE (ALC):	ACH FORMAT:
	01-00-0001	CCD+ CTX
ADDRESS:		
2ND & D STS., SW, FO	RD HOUSE OFFICE BUILDING	
WASHINGTON, DC 200	124	*
	)24	TELEPHONE NUMBER:
CONTACT PERSON NAME:		( )
ADDITIONAL INFORMATION:		
	PAYEE/COMPANY	INFORMATION
NAME	TATEL/OUTH AIT	SSN NO. OR TAXPAYER ID NO.
ADDRESS		
CONTACT PERSON NAME:		TELEPHONE NUMBER:
CONTACT LIBOR RAME.		
	FINANCIAL INSTITUT	ION INFORMATION
NAME:		
ADDRESS:		
		¥ 7
ACH COORDINATOR NAME:		TELEPHONE NUMBER:
NINE-DIGIT ROUTING TRANSIT N	UMBER:	
DEPOSITOR ACCOUNT TITLE:		
DEPOSITOR ACCOUNT NUMBER:		LOCKBOX NUMBER:
DEPOSITOR ACCOUNT NOMBER		
TYPE OF ACCOUNT:		
	CHECKING SAVINGS	LOCKBOX
SIGNATURE AND TITLE OF AUTH	ORIZED OFFICIAL:	TELEPHONE NUMBER:
Could be the same as ACH Coord	inator)	

AUTHORIZED FOR LOCAL REPRODUCTION

SF 3881 (Rev. 2/2003 ) Prescribed by Department of Treasury 31 U S C 3322; 31 CFR 210

# **ATTACHMENT**

4

# ARCHITECT OF THE CAPITOL VENDOR REQUEST FORM

SECTION I. To Be Comp	oleted By AOC Pers	onnel Before Sending T	o Procurement	(fax 225-3221)		
Vendor Name:	Name:			X number:		
Name (Printed and Signature) of AOC Personnel  Signature certifies that this request is for addition or me		for the purposes of conducting	ng valid business w	with the Architect of the C	Capitol.	
Name of Vendor Personnel to be Sent	our control of a vonco.	Vendor Phone No.:		Vendor Fax No.:		
This Form Vendor Number (required for modifications to a vendor already on file):				e Request Submitted to	o Procurement:	
SECTION II. To be con	mpleted by vendor.	For assistance on SEC	FION II, call (2)	02) 226-2557		
Vendor Name:	4			*		
Mailing Address:				* a		
	ž.			20		
Physical Address:						
Vendor Phone No.:	Vendor Fax No.:		Vendor DUNS N	No.:	2.5	
Tyr	pe of Contractor (See	Attached Page For Infor	rmation)			
If small business, check all that apply in this colum		a small business, check	only one of the b	pelow categories		
Small Business Concern	Large	Large Business				
HUBZone Small Business	Histo	Historically Black College/University				
Small Disadvantaged Business		Educational Institution				
8(a) Program Participant	JWO	JWOD AbilityOne Non Profit Agency				
Service Disabled Veteran Owned	Other	Other Non Profit Organization				
Veteran Owned Small Business	Other	Other Entities (State/Local/Federal Gov.)			3/8	
Warmer Owned Small Business						
SECTION III. To be con	mpleted by vendor.	For assistance on SEC	TION III, call (	202) 226-2552.		
Vendor's Remittance Name and Address:			ži.	e5 74	10 E	
SECTION IV. To be cor	mpleted by vendor.	For assistance on SEC	TION IV, call (2	202) 226-2557.		
Printed Name and Title of Vendor Representative	100 E.S.			160	11 99 89	
Signature of Vendor Representative			Telephone No	o.:	172	
E-mail Address			Date:		1.0	
	SECTION V	: For AOC Use Only	1			
				CV-ici- Finani-1	Data Entered	
Signature and Date of Procurement Staff Entering	g Data	Signature and Date of	Accounting Stat	i ventying rinancial	Data Entered	

INSTRUCTIONS TO VENDORS

Complete the attached W-9 IRS form. SSN or EIN must be provided. W-9 is also available at <a href="www.irs.gov">www.irs.gov</a> under "More Forms and Publications".

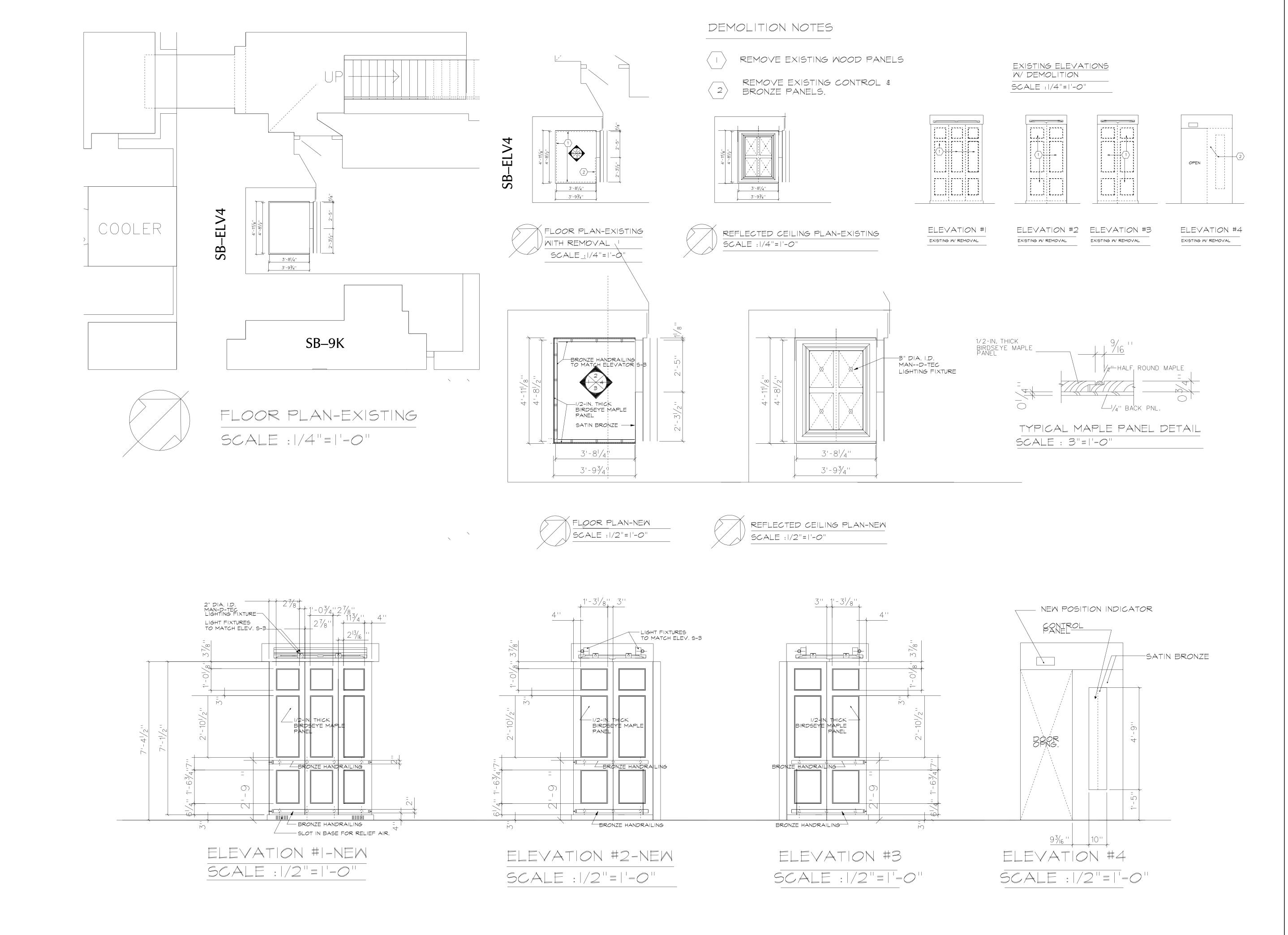
If requesting payment made via Electronic Funds Transfer, complete the enclosed SF 3881 ACH VENDOR/MISCELLANEOUS PAYMENT ENROLLMENT FORM. This form is also available at www.gsa.gov under "Forms Library" "Standard Forms".

Upon completion of the Vendor Request Form, fax it, Form W-9, and the SF 3881 ACH VENDOR/ MISCELLANEOUS PAYMENT ENROLLMENT FORM, if EFT is requested, to: Procurement Division (202) 225-3221 or e-mail to AOCProcurement@aoc.gov. To verify receipt, call (202) 226-2557.

# TYPE OF CONTRACTOR

A small business is one that is organized for profit, has a place of business in the United States, and does not exceed the size standard for its industry. It may be a sole proprietorship, partnership, corporation, or any other legal entity. An entity that is organized for profit, has a place of business in the United States, and exceeds the size standard for its industry is a large business. An entity that is not organized for profit is a nonprofit organization, e.g., the American Red Cross, universities, and foundations. An entity organized for profit that is not in the United States is a foreign contractor.

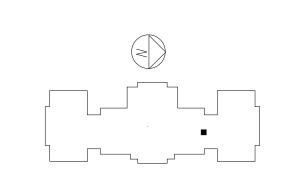
Small disadvantaged business, women-owned small business, veteran-owned small business, service-disabled veteran-owned small business, and HUBZone small business are each subsets of small business. Generally, not less than 51% of the business must be owned by the type of individual described in order to be considered of that category, e.g., in order to be a veteran-owned small business, not less than 51% of the business must be owned by one or more veterans with the management and daily business operations controlled by one or more veterans. Small disadvantaged businesses and HUBZone small businesses require certification by the U. S. Small Business Administration. For help in determining the type of contractor you are please visit the following link: http://www.sba.gov/gopher/Government-Contracting/Size/



TOF CAPITO 1793

REVISIONS:
NO DESCRIPTION DATE

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RECOMMENDED FOR APPROVAL

DIRECTOR OF DESIGN SERVICES

DIRECTOR OF PLANNING & PROJECT MANAGEMENT

STEPHEN T. AYERS, AIA ACTING ARCHITECT OF THE CAPITOL

UNITED STATES CAPITOL

ELEVATOR S-4 RENOVATION

PLAN, ELVATIONS

AS SHOWN J.B. CA,BTA
PROJ. NO. IFB NO.
CB07003
CAD FILE NO.
CB07003 USC S-4 A101.DGN
DRAWING NO.

USC ELV.S-4 AIOI

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